A Guide to Taxila

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A GUIDE TO TAXILA

BY

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PLATE I.

HEAD OF DIONYSUS, SIRKAP.

A GUIDE TO TAXILA

CHAPTER I

Topography

LOCATION OF TAXILA AND CHARACTER OF COUNTRY IN ANCIENT TIMES.

The remains of Taxila are situated immediately to the east and north-east of the junction of that name on the N.-W. railway, twenty miles north-west of Rawalpindi.[1] The valley in which they lie is a singularly pleasant one, well-watered by the Haro river and its affluents, and protected by a girdle of hills—on the north and east by the snow mountains of Hazāra and the Murree ridge, on the south and west by the well-known Mārgalla spur and other lower eminences. This position on the great trade route, which used to connect Hindustān with Central and Western Asia, coupled with the

[1] There are good refreshment and waiting rooms for travellers at Taxila railway station, and a small Public Works' bungalow about a mile distant, permission to occupy which may sometimes be obtained from the Executive Engineer, Rawalpindi District. Less than half a mile from the Station is the Archæological Museum where permits are issued to view the excavations and where the visitor will find a large and varied collection of antiquities obtained from the several sites.

strength of its natural defences, the fertility of its soil, and a constant supply of good water, readily account for the importance of the city in early times. Arrian speaks of it as being a great and flourishing city in the time of Alexander the Great, the greatest indeed, of all the cities which lay between the Indus and the Hydaspes (Jhelum).[1] Strabo tells us that the country round about was thickly populated and extremely fertile, as the mountains here begin to subside into the plains,[2] and Plutarch[3] remarks on the richness of the soil. Hsüan Tsang[4], also, writes in a similar strain of the land's fertility, of its rich harvests, of its flowing streams and of its luxuriant vegetation.

From the map on Plate XXVI it will be seen that stretching across this tract of country, from north-east by east to south-west by west, is a ridge of hills of which the western termination is called Hathiāl. This ridge of hills is a rocky and precipitous spur of limestone formation, which projects into the valley from the mountains on the East, and divides the eastern part of it into two halves. The northern half is now-a-days singularly rich in crops, being watered by numerous artificial canals taken off from the higher reaches of the Haro river;

[1] Bk. V. Ch. 3. *Cf.* McCrindle, *The invasion of India by Alexander the Great* p. 92. Pliny (*Hist. Nat. VI, 25*) says that the district was called 'Amanda'.

[2] Bk. XV, Ch. 28. McCrindle, *Ancient India*, p. 33.

[3] Ch. LIX.

[4] Watters, *On Yuan Chwang*, Vol. I, p. 240.

the southern half is less fertile, being intersected by many deep ravines and broken by bare stony knolls, on many of which are ruins of old-time stūpas and monasteries. Through this part of the valley and skirting the western foot of the Hathiāl hill runs the Tabrā or Tamrā nālā, which is manifestly identical with the stream called Tiberonabo, Tiberoboam, or Tiberio-potamos referred to by classical authors.[1] Through the northern half of the valley flows the Lunḍī nālā, another tributary of the Haro river, which like the Tamrā nālā now runs in a deep bed, but in old days, no doubt, was nearer the surface.

Bhiṛ Mound.

Within this valley and within three and a half miles of each other are the remains of three distinct vated plateau, known locally as the Bhiṛ mound, between the railway from Taxila to Havelian and the Tamrā nālā, above the bed of which it rises to a height of between 60 and 70 feet. From north to south this plateau measures about 1,210 yards and from east to west, at its widest point, about 730. On its western and southern sides its boundaries follow a fairly regular line, but on the east and north they sweep along the edges of the bays and bluffs above the Tamrā nālā, and in some of these bays, where the soil has been washed down into the ravine below, it is no longer possible to trace with accuracy the original position of the

[1] *Cf.* Sylvain Lévi, *J. A.*, Tome XV (8me Serie), pp. 236-7, and McCrindle, *Ancient India*, pp. 342-3.

walls. According to local tradition, the Bhir mound is the most ancient of all the sites at Taxila, and this tradition has been fully confirmed by the remains recently unearthed in it, which show that the mound was occupied several centuries before the coming of the Greeks, who in the early part of the 2nd century B. C. transferred the city to the area now known as Sirkap.

SIRKAP. This second city of Sirkap occupied the western spurs of the hill of Hathiāl, together with a well defined plateau on their northern side, and originally included the area called Babar Khāna or the Kachchā Koṭ from the fact that it was defended by earthen ramparts only, a section of which can still be seen enclosed within a bend of the Tamrā nālā. The inner city wall, which is of stone, was a later creation, having been erected in the time of one of the early Indo-Scythic kings, probably Azes I about the middle of the 1st century, B.C. On the western edge of the plateau this inner wall has an irregular alignment broken by various salients and recesses, but on the north and east it is quite straight, and from the south-east corner of the plateau it proceeds in the same straight line up the steep side of the northern ridge of Hathiāl, then drops across a valley, traverses a second ridge and depression, and so ascends to the summit of the third and highest ridge on the south. From this point it turns in a westerly direction and descends the rocky edge of the ridge to its western corner; after which it takes a sharp turn to the north, and bends west again around a prominent bluff above

the Tamrā nālā, and so returns north along the western edge of the plateau. Within its perimeter the city wall thus takes in three rocky and precipitous ridges of the Hathiāl spur, besides an isolated flat-topped hill, which rises in a gradual slope from the bluff above referred to, and the whole of the level plateau to their north. The length of this wall is approximately 6,000 yards, its thickness varying from 15 ft. to 21 ft. 6 in. Throughout its whole length both the core and facing of the wall are composed of rubble stones of no great size or stability, the construction being in all respects similar to that of other buildings of the Greek and Śaka-Pahlava epochs, and, like them, liable to fall easily to ruin. The outer curtain of the wall is strengthened by bastions which, so far as they have been examined, are all rectangular in plan (pp. 78-79).

To judge by its position and configuration, it seems probable that the isolated flat-topped hill mentioned above served as the akropolis of the ancient city of Sirkap; but it is likely that the whole of the area comprised within the Hathiāl ridges and between them and this hill was also specially fortified as a place of refuge in case of siege. To this end an inner line of fortifications appears to have been carried along the north side of the akropolis, as well as along the base of the northern ridge of Hathiāl, access to the interior fort being provided by a gateway in the depression between the two hills.

SIRSUKH.

The third city, called Sirsukh, is situated still further to the north-east, on the opposite side of the Luṇḍī nālā. This city appears to have been built by the Kushāns, probably during the reign of Kanishka. Its plan is roughly a parallelogram, and the circuit of the walls is not far short of three miles[1]. The walls, which are relatively well-preserved along part of the southern and eastern sides, are of massive construction, some 18 feet or more in thickness and protected by circular bastions on their outer side. The facing of the walls is in the 'large diaper' masonry which came into vogue in the late Parthian period, about the middle of the 1st Cent. A.D.; the bastions are circular,[2] and the intervals between them measure 90 feet. Inside the city are three modern villages, Mīrpur, Tofkiāñ, and Piṇḍ Gākhṛā, placed on the remains of ancient buildings, which are still peeping out from the débris among the houses.

MONUMENTS OUTSIDE THE CITIES.

In addition to these three city sites—the Bhir mound, Sirkap and Sirsukh—there are many other detached monuments, mainly Buddhist stūpas and monasteries, scattered about over the face of the surrounding country. The Buddhist remains are specially numerous in the southern half of the valley, where they occupy many of the barren hillocks alongside the Tamrā nālā, conspicuous

[1] Hsüan Tsang (A.D. 629-645) describes Sirsukh, the city of his time, as only *10 li* (=1⅔ miles) in circuit. Perhaps by then the original city had considerably shrunk.

[2] Not square, nor placed at intervals of 120 feet, as stated by Gen. Cunningham (C.S.R. II, 121).

among them being the imposing Dharmarājikā Stūpa, known locally as the "Chir" or "Split" Tope, from the great cleft which former explorers drove through its centre. Other monasteries excavated in this area are the four marked A, B, C and D, respectively, in the Map (Pl. xxvi), which are situated a little to the S.-E. of the Dharmarājikā stūpa, and two in the secluded glens near the villages of Khurram Gujar and Khurram Prāchā. In the northern half of the valley, however, and among the hills of the Hathiāl ridge are many other Buddhist settlements, of which six have already been excavated and have yielded results of surpassing interest. These are the Kunāla stūpa and monastery, which stand on the northern ridge of Hathiāl, partly covering the old city wall of Sirkap; the stūpas and monasteries at Mohrā Morādu, Pippala and Jauliāñ further to the east, and those at Bādalpur and Lālchak in the valley to the north. At Jandiāl, a little to the north of the Kachchā Kot, are two conspicuous mounds, on one of which is a spacious temple dedicated, there is good reason to believe, to fireworship; and a little north of these, again, are the remains of two smaller stūpas—which may have been either Jaina or Buddhist, probably the former. Still further north, a far-seen land-mark is provided by the lofty Bhallar Stūpa, which occupies a prominent position on the last spur of the hills bounding the valley of Taxila on the north.

Besides these remains there are, dotted here and there in the valleys and hills, many other eminences

of ancient days, but the sites mentioned above are the most important ones yet excavated, and it is unnecessary here to enter into particulars regarding the others.

CHAPTER II

History

Notwithstanding the power and wealth of Taxila in ancient days, the information we possess regarding its history is singularly meagre, being drawn in the main from the accounts of Greek or Chinese writers, or laboriously pieced together with the help of coins and a few rare inscriptions. The name of the city was Takkasilā or Takhaśilā (in Sanskrit, Takshaśilā),[1] which in Greek and Roman writers was transcribed as Taxila. Its foundation goes back to an early age. In the Mahābhārata[2] it is mentioned in connexion with the great snake sacrifice of King Janamejaya, by whom it had been conquered. About the beginning of the 5th century before our era it was probably included in the Achæmenid Empire of Persia; for the inscriptions

PERSIAN EMPIRE.

[1] Meaning probably "the city of cut stone." The name of Taxila in Tibetan is "*rdo-bjog*" meaning "cut stone." Fa-Hien calls it "*chu-shu-shi-lo*" or "the severed head," adding in explanation thereof that "Buddha bestowed his head in alms at this place."

[2] The more important references to Taxila in Indian literature have been collected by Dr. V. S. Sukthankar. *A. S. R.* 1914-15, Pt. II, pp. 36-41.

of Darius at Persepolis and on his tomb at Naksh-i-Rustam make mention of a new Indian satrapy, regarded as the richest and most populous in the Empire, which, being distinct from Aria, Arachosia and Gandaria, may be assumed to have comprised Sind and a considerable part of the Panjāb east of the Indus.[1] An interesting relic of Persian influence at Taxila is an inscription in Aramaic characters set up, apparently, in honour of some high official and dating from the third century B.C. (p. 90). That Taxila at this time and during the centuries immediately following enjoyed a great reputation as a University town, famous for the arts and sciences of the day, is evident from numerous passages in the Buddhist Jātakas, and it is worthy of remark that Chānakya, the well-known Brahman Minister of Chandragupta Maurya, was born here; but, apart from these facts, virtually nothing is known of the history of the city prior to the invasion of Alexander the Great. That monarch descended on the Panjāb and received the submission of Taxila in the spring of 326 B.C., halting there for some weeks preparatory to his attack on Porus. From the extant accounts of Alexander's expedition, based on the writings of his own companions or contemporaries, we learn that the city was then very wealthy, populous and well governed, and that its territories extended from the Indus to the Hydaspes. We learn, too, that polygamy and the practice of

ALEXANDER THE GREAT.

[1] *Cf.* V. S. Smith, *Early History of India*, 3rd Ed., p. 38. On the other hand, some of the Jātakas refer to Taxila as a capital city of Gandhāra itself.

satī were in vogue; that girls too poor to be wedded were exposed for sale in the market place; and that the bodies of the dead were thrown to the vultures. At the time of Alexander's invasion, the reigning king Āmbhi, known to the Greeks as Omphis or Taxiles,[1] was at war not only with the powerful kingdom of Porus (Paurava[2]) on the further side of the Jhelum, but with the neighbouring Hill State of Abhisāra, and it was no doubt in the hope of securing Alexander's help against these foes that he sent an embassy to wait upon the Macedonian at Und (Udabhānda) and led out his troops in person from Taxila, in order to place them at the service of the conqueror, afterwards entertaining him with lavish hospitality at the capital and providing a contingent of five thousand men for the expedition against Porus. In return for these and other friendly acts, Āmbhi was confirmed in the possession of his own territories and rewarded by the accession of new ones, while his position was further strengthened by a reconciliation with Porus.

The Macedonian conquest of North-Western India was a splendid achievement, but its effects were short-lived. Alexander had intended the permanent annexation of the North-West, and for that purpose he left colonies and garrisons behind him to consolidate what he had won, but within six years of his death, which took place in 323 B.C., Eudamus, the Greek Governor, withdrew from the

[1] Manifestly a territorial title.

[2] A title denoting a chief of the Pūrus.

Indus valley with all the forces he could muster to assist Eumenes against Antigonus, and about the same time, or perhaps even earlier, Chandragupta drove out the Greek garrisons east of the Indus, and proceeded to incorporate Taxila and the other states of the Panjāb into the empire of Magadha. Then followed, about 305 B.C., the transient and ineffective invasion of Seleucus Nicator, who sought to reconquer the lost possessions of Alexander, but was reduced to making a hasty and humiliating peace with Chandragupta, under the terms of which all the old Macedonian provinces, as far as the Hindu Kush, were ceded to the Indian monarch.[1] To the states of the Panjāb the iron hand of Chandragupta seems to have proved as oppressive as that of the Greeks before him, and, when his son Bindusāra succeeded to the throne of Magadha, Taxila threw off the Maurya yoke and was not, seemingly, brought to submission until the Crown prince Aśoka himself appeared before its gates. Aśoka afterwards ruled here as viceroy on behalf of Bindusāra, and during his father's and his own life-time he appears to have maintained the Maurya power throughout the North-West no less efficiently, though perhaps less harshly, than did his grandfather Chandragupta. To him, no doubt, was sub-

SELEUCUS NICATOR.

MAURYA EMPIRE.

[1] The hasty conclusion of this peace, by which Seleucus Nicator received only 500 elephants in exchange for so vast a tract of country, was probably due no less to the danger with which he was threatened by Antigonus in the West, than to the unexpectedly strong opposition of Chandragupta, though Seleucus must have recognised the impracticability of ever effectively holding the disputed provinces.

sequently due much of the strength which Buddhism gained in this part of India.[1]

Bactrian Greeks.

Soon after Aśoka's death, which occurred about the year 231 B.C., the empire of Magadha began to break up, and Taxila, along with other outlying provinces, was able once again to assert her independence, only to fall an easy prey to fresh Greek invaders from Bactria whom the decline of the Maurya power invited eastward. These invaders were the descendants of the Greek colonies which Alexander the Great had planted in Bactria and which, unlike the colonies of the Panjāb, had taken firm root and flourished. Thus, although the Macedonian's conquest of the Panjāb made no permanent impression upon India, his conquest of the neighbouring countries was indirectly responsible for the subsequent establishment of Greek culture and Greek art in the North-West. The first of the Bactrian invaders to reach Taxila was Demetrius, son-in-law of Antiochus the Great (c. 190 B.C.), who carried his arms successfully through the Kābul valley, the Panjāb and Sind. Fifteen or twenty years later came Eucratides, who wrested first Bactria and then part of his Indian possessions, including Taxila, from Demetrius. From these two conquerors there sprang two rival lines of princes, who continued in India the feud

[1] There is a tradition recorded by Hsüan Tsang to the effect that Khotan was first colonized by exiles from Taxila, banished by Aśoka after the blinding of his son, Kunāla. See pp. 60-61 *infra*, and Stein, *Ancient Khotan*, I, pp. 156 sqq.

which had been started in Bactria,[1] encroaching from time to time upon each other's territories. Among the Greek kings who ruled over Taxila, Apollodotus apparently belonged to the house of Demetrius, Antialcidas to that of Eucratides.[2] Of the many other Greek rulers in the Panjāb and North-West our knowledge at present is too meagre to determine which of them ruled at Taxila, and what connexion, if any, they had with the one or the other of these two houses.

SCYTHIANS AND PARTHIANS.

The rule of the Greeks at Taxila had endured for little more than a century when it was swept away by invading hosts of Scythians from the west. These Scythians or Śakas, as they were known in India, had long been settled in the Parthian Province of Sīstān, and had there mingled and intermarried freely with the Parthian elements in the population. From Sīstān they overran Arachosia and the neighbouring countries, and thence passed across the Indus to the conquest of the Panjāb. In Arachosia, one section of these invaders remained and established its supremacy under the leadership of a Parthian named Vonones; while another section, under the Śaka chief Maues, pressed eastward and conquered the kingdom of Taxila. Maues appears to have risen to power in Arachosia about 95 B.C., and to have reached Taxila some ten or fifteen years later. He was succeeded in or about

[1] *Cf.* Rapson, *Ancient India*, p. 128.

[2] *Op. cit.*, p. 133; C. H. I., Vol. I, pp. 546-559. Other authorities take Apollodotus to be a son of Eucratides. Cunningham, *Numismatic Chron.*, 1869, pp. 241-3.

58 B.C. by Azes I, who had been intimately associated with the family of Vonones in the government of Arachosia, and was, in fact, perhaps as much a Parthian as a Śaka. Though little is known of Azes I, there can be no doubt that his reign was a long and prosperous one, and it is probable that he was responsible for extending and consolidating the Śaka power throughout North-West India as far as the banks of the Jumna. In the administration of his dominions he adopted the old Persian system of government by satraps, which had long been established in the Panjāb, and this same system was continued by his successors.

About the third decade of our era, the kingdoms of Taxila and Arachosia were united under one rule by the Parthian Gondophares, the fame of whose power spread to the Western world, and who figured in early Christian writings as the prince to whose court St. Thomas the Apostle was sent. This union of the two kingdoms may be presumed to have been a peaceful one. After its achievement Gondophares proceeded to annex the Kābul valley, probably from the Kushāns, who seem already to have supplanted the Greeks in that region. There could have been little cohesion, however, in this empire of Gondophares; for no sooner had his personal authority been removed than the satraps of the various Provinces asserted their own sovereignty. Abdagases, the nephew of Gondophares, took the Western Panjāb; Orthagnes, and after him Pakores, Arachosia and Sind; and other parts of his dominions fell to other princelings, among

whom were Sasas, Sapedana, and Satavastra, whose coins I have discovered for the first time at Taxila.

PARTHIAN CULTURE.

On the period of Parthian supremacy at Taxila much light is shed by the multitude of monuments and antiquities unearthed in the 2nd city of Sirkap, which give us a hardly less instructive picture of life on the far eastern outskirts of the great Parthian Empire than the remains at Dura-Europos in Syria do on its western. Parthian culture in Syria, with its Syro-Hellenistic colouring, is necessarily very different from Parthian culture in the Panjāb. Yet it is surprising to observe how much there is in common between the two, and how very distinctive and homogeneous the culture of the Parthian Empire in general must have been. The Parthians were not only the fine riders and bowmen that Roman and Armenian writers have described but were an energetic, progressive and highly civilized people. Iranian by race and speaking an Iranian tongue, they had once formed an integral part of the empire of the Medes and Persians, and from this empire, as well as from the succeeding empires of Alexander and Seleucus, they inherited the culture and refinement of both Greece and Persia. On their coinage, the Arsacids styled themselves "Philhellenes", and this was no empty boast, for Greek was used generally as their official language, just as Aramaic had been under the Achæmenids, and every fresh excavation shows how deeply impregnated they were with Hellenistic ideas. Let it be remembered, too, that the Parthians held the carrying trade between the Near

and Middle East, and imported quantities of manufactures and *objets d'art* from the Mediterranean coasts to India and *vice versâ*.

Apollonius of Tyāna.

It was during the Parthian supremacy, probably in the year 44 A.D., that Apollonius of Tyāna is reputed to have visited Taxila. According to his biographer Philostratus, the king then reigning at Taxila was named Phraotes, who was independent of Vardanes, the Parthian king of Babylon, and himself powerful enough to exercise suzerain power over the satrapy of Gandhāra.[1] Approaching Taxila from the north-west, Apollonius halted at a temple in front of the wall, which he describes in some detail, and which, as we shall presently see, may possibly be identical with the temple at Jaṇḍiāl. The city itself, *viz.*, the city of Sirkap, was, he says, about the same size as Nineveh and fortified like the cities of Greece on a symmetrical plan.[2] The streets were narrow and irregular like the streets of Athens, and the houses had the appearance of being one-storied, but had in reality basement rooms underground. Inside the city was a temple of the Sun and a royal palace, the latter of which was distinguished by its simplicity and lack of ostentation, very different from the splendour which Philostratus had seen at the court of Babylon.

[1] It is worthy of remark that Phraotes found it necessary to pay subsidies to the wilder tribes on his frontier in order to keep them quiet.

[2] The words τετειχίσθαι δὲ ξυμμέτρως are translated by Conybeare "fairly well fortified," but this can hardly be the meaning here.

The credibility of the story of Apollonius, as related by Philostratus, has been reasonably questioned by modern critics, and there is no doubt that there is much fiction in it mingled with the truth. On the other hand, there is little in the account of Taxila which is not borne out by what we know of the history of those times, while some details find remarkably strong corroboration in my own discoveries. It is a reasonable inference, therefore, that Apollonius did in fact journey as far as Taxila, and that Philostratus had access to the notes of his companion Damis. These notes were probably correct, so far as his own personal observations went, but coloured by hearsay stories related to him; and it is likely that other "travellers' tales" were culled by Philostratus from earlier Greek writers, in order to enliven his narrative.

THE KUSHĀNS. To revert, however, to the history of Taxila. With the dismemberment of the Indo-Parthian empire a way was opened to the Kushāns, not only to regain their former possessions in the Kābul valley of Afghānistān, but to extend their conquests further in Gandhāra and the Panjāb. These Kushāns were a tribe of the people called by the Chinese historians Yüeh-chih,[1] who emanated originally from the extreme north-west of China. From China they were driven westward about 170 B.C., and proceeded to occupy, first, Bactria and the region of the Oxus valley; then the Kābul valley;

[1] The Yüeh-chih are commonly known as the Kushāns, because it was to the particular Kushān tribe that their kings belonged.

and, finally, the plains of Northern India. The chronology of this period is by no means certain, but it seems probable that it was between 60 and 64 A.D. that Kujūla Kadphises wrested Taxila from the Parthians, and in 78 A.D. that he was succeeded by V'ima Kadphises, who consolidated and enlarged the empire which his predecessor had won[1]. To about this period belong the coins of the nameless ruler commonly known as Soter Megas, who may have been identical with V'ima Kadphises[2]. Then followed, in the second century of our era, the great and powerful Kanishka, the most famous of all the Kushāns, and after him Huvishka and Vāsudeva. Kanishka made his winter capital at Purushapura, the modern Peshāwār, and extended his conquests over a wide area, from Central Asia to the borders of Bengal, and it is probable that this empire was maintained intact by his immediate successors. The death of Vāsudeva probably occurred in the first half of the third century A.D., and from this time forward the Kushān power gradually declined,[3] though it survived in the Panjāb until the invasion of the White Huns or Ephthalites in the 5th century of our era.

[1] Others take the view, which has much to be said in its favour, that it was V'ima, not Kujula, Kadphises who conquered Taxila between 60 and 64 A. D. and was succeeded by Kanishka in 78 A. D. Cf. C. H. I. I, p. 584.

[2] There seems to me to have been a break between the reigns of Kadphises II and Kanishka.

[3] The decline of the Kushān power may have been hastened by an unrecorded Sasanian invasion. Many Sasanian coins have been unearthed at Taxila.

In the year 400 A.D. the Chinese pilgrim Fa Hien visited the Buddhist monuments at Taxila, but unfortunately has left us no particulars about them. From his accounts of other places in that part of India, however, it is evident that at the time of his pilgrimage the great Buddhist sanctuaries of the North-West were still relatively vigorous and flourishing; and it is no less evident from the condition in which they have been unearthed, that the monuments of Taxila were wantonly and ruthlessly devastated in the course of the fifth century. This work of destruction is almost certainly to be attributed to the hordes of barbarian White Huns, who after the year 455 A.D. swept down into India in ever increasing numbers, carrying sword and fire wherever they went, and not only possessed themselves of the kingdom of the Kushāns, but eventually overthrew the great Empire of the Guptas.

DESTRUCTION BY THE WHITE HUNS.

From this calamity Taxila never again recovered, and when Hsüan Tsang visited it in the seventh century, he found it had become a dependency of Kashmīr, that the local chiefs were at feud with one another, and that most of the monasteries were ruined and desolate.[1]

HSÜAN TSANG.

Of the exploration of the remains at Taxila up to the time when the writer started his operations, there is little to chronicle. Like most ancient sites in this part of India, it was long subjected to the

MODERN EXPLORATIONS.

[1] As regards the monuments described by Hsüan Tsang, *see* p. 60 below.

depredations of amateur archæologists or treasure-seekers. Among the former were Major Pearse, Major Cracroft, Deputy Commissioner of Rawalpindi, and Mr. Delmerick. Of the latter, one of the worst offenders was a *bhisti* of the village of Shāh Ḍherī named Nur, who in the fifties and sixties of last century seems to have made his living by opening small stūpas in the neighbourhood and disposing of their contents to Government officials or antiquity dealers. He it was who discovered an inscribed gold plate in one of the stūpas near Jaṇḍiāl[1] and dispoiled many other structures of their relics. It was not, however, until 1863, when Gen. Cunningham turned his attention to the site, that its identity with the ancient Taxila was established. This identity, which Gen. Cunningham had first surmised on the strength of the topographical indications afforded by ancient writers, was confirmed by the discovery on the part of some villagers of a stone vase in one of the stūpas[2] near Shāhpur, the inscription on which records that the stūpa in question had been erected at Taxila. Gen. Cunningham's own explorations, which were carried out in the cold seasons of 1863-64 and 1872-73, were limited to mere superficial trenches and pits near the north-east corner of the city of Sirkap, and in some of the isolated mounds on Hathiāl, at Jaṇḍiāl, Mohrā Maliārāñ, and Seri-ki-Piṇḍ.

[1] *Cf. C. S. R.* II, Pl. LIX, where hand-copies of this and several other inscriptions of great interest are reproduced.

[2] No. 13 of Gen. Cunningham's plan in *C. S. R.*, Vol. II, Pl. LXIII.

The only discoveries of any consequence made by him were two temples of inconsiderable size near the village of Mohṛā Maliārāñ,[1] one of which was remarkable for the Ionic columns with which it was adorned. The results of these operations are embodied in Gen. Cunningham's reports for the years 1863-64 and 1872-73. Since the latter date further spoliation among these historic remains has been effected by neighbouring villagers, and numerous antiquities from here have found their way into the hands of the dealers of Rawalpindi. In no case has there been any system or purpose other than that of treasure-seeking in these haphazard excavations, nor has any record of them been preserved.

Of the excavations which the writer has conducted at Taxila during the last 20 winter seasons, illustrated accounts are published in his Annual Reports and Memoirs.[2]

Chronology of important events connected with Taxila.

563-2 . . .	Birth of Siddhārtha or Gautama Śākyamuni, the Buddha.
B. C. 558-529 .	Cyrus or Kurush, founder of the Achæmenid Empire of Persia.

[1] *C. S. R.*, Vol. V, pp. 68-73 and plates XVII-XIX.

[2] *Annual Reports of the Director General of Archæology*, 1912-13, Pt. I, pp. 8-17, Pt. II, pp. 1-52; 1913-14, Pt. I, pp. 11-17; 1914-15, Pt. I, pp. 13-16, Pt. II, pp. 1-41; 1915-16, Pt. I, pp. 3, 4, 10-12, Pt. II, pp. 1-38; 1917-18, Pt. I, pp. 8-9; 1919-20, Pt. II, pp. 18-24. 1920-21, Pt. II, pp. 17-23; 1923-24, pp. 61-66; 1924-25, pp. 46-50; 1926-27, pp. 110-19; 1927-28, pp. 54-67; 1928-29, pp. 51-66. *Memoirs of the Archæological Survey of India*, No. 7—'The stupas and monasteries of Jauliāñ'.

527 or 467 . .	Death of Mahāvīra Vardhamāna Jñātaputra, founder of the Jaina religion.
522-486 . .	Darius Hystaspes (Dārayavush Vishtāspa), king of Persia.
	Taxila and the north-west of India annexed to the Persian Empire. (C. 518 B.C.).
	Skylax of Karyanda explores the lower course of the Indus. (C. 517 B.C.).
486-465 . .	Xerxes (Khshayārshā), king of Persia.
483 . . .	Death (*Mahāparinirvāṇa*) of the Buddha.
326 . . .	Alexander the Great receives submission of Āmbhi, king of Taxila, and afterwards defeats Porus at the Hydaspes (*Vitastā*-Jihlam).
323 . . .	Death of Alexander at Babylon.
321 . . .	Second partition of Macedonian Empire at Triparadeisos. Seleucus Nicator obtains Babylon, Syria, and Persia; Āmbhi is confirmed in possession of the Hydaspes country; Porus in that of the lower Indus.
317 . . .	Eudamus withdraws from the Indus valley, and Chandragupta, founder of the Maurya dynasty, makes himself master of the Panjāb.
312 . . .	(Oct. 1st) Establishment of the Seleucid era.
305-303 . .	Seleucus invades India and is repulsed by Chandragupta.
300 Cir. . .	Megasthenes, ambassador of Seleucus, at the court of Chandragupta.
298 . . .	Accession of Bindusāra Maurya. During his reign his son Aśoka is Viceroy at Taxila. Deimachus, ambassador of Seleucus, at Pāṭaliputra.
274 . . .	Accession of the Emperor Aśoka.
250 Cir. . .	Bactria and Parthia assert their independence.
232 . . .	Death of Aśoka; break-up of Maurya Empire begins.
190 Cir. . .	Demetrius of Bactria conquers the Panjāb.
175-170 . .	Eucratides wrests the power from Demetrius, first in Bactria, then in the Panjāb. Foundation of the city of Sirkap.

139 Cir. . .	Mithridates I of Parthia overthrows kingdom of Bactria.
130 Cir.. . .	Antialcidas, King of Taxila. Heliodorus sent as ambassador to king of Vidiśā in Central India.
123-88 . . .	Mithridates II, the Great, king of Parthia.
85-80 (?) . .	Maues, the Scythian king, conquers Taxila after reign of Archebius.
72 Cir. (?) . .	Liaka Kusūlaka, Satrap.
58 . . .	Beginning of Vikrama era. About this date Azes I succeeded Maues, and was himself succeeded by Azilises and Azes II.
B.C. 40 . . .	Rājuvula Satrap; afterwards Great Satrap of Mathurā.
B.C. 5 Cir. . .	Accession of Azes II (?).
A.D. 20-30 . .	Kingdoms of Arachosia and Taxila united under one rule by Parthian Gondophares.
35 Cir. . . .	Conquest of Kābul valley by Gondophares.
40 Cir. . . .	Visit of St. Thomas, the Apostle, to the court of Gondophares.
44 . . .	Visit of Apollonius of Tyāna. Phraotes (?) ruling at Taxila.
50-60 . . .	Death of Gondophares and division of empire among various Parthian princes, including Abdagases, Orthagnes and Pakores.
60-65 Cir. . .	Kujūla or V''īma Kadphises reconquers Kābul valley and afterwards Gandhāra and Taxila.
78 A.D. . .	Beginning of Śaka era; it probably marks the establishment of the Kushān empire in India by V'īma Kadphises; others think by Kanishka.
100 Cir. . .	Soter Megas.
125 „ . . .	Probable accession of Kanishka the Kushān. Foundation of the city of Sirsukh.
146 „ . . .	Arrian, author of the *Indika*, flourished.
170 „ . . .	Accession of Huvishka.
187 „ . . .	Accession of Vāsudeva.
225 „ . . .	Death of Vāsudeva and break-up of Kushān empire.
226 . . .	Ardashīr-i-Bābegān founded the Sasanian dynasty of Persia.

319 . . .	Chandragupta I, founder of the Imperial Gupta dynasty, crowned. Gupta era begins.
400 . . .	Fa Hien, the Chinese pilgrim, visits Taxila.
430 . . .	Kidāra Shāhi establishes the kingdom of the Little Kushāns.
450-500 . .	Invasions of Ephthalites or White Huns and expulsion of Little Kushāns from Gandhāra. Destruction of many monuments at Taxila.
510 Cir. . .	Death of Toramāṇa and accession of Mihiragula.
520 . . .	Sung Yün, the Chinese pilgrim, in Gandhāra.
629-645 . .	Hsüan Tsang, the Chinese pilgrim, visits India.

CHAPTER III

Art [1]

We have seen in the foregoing chapter that between the fifth century B.C. and the fifth century A.D. Taxila was under the dominion, successively, of seven different peoples, namely: the Persians, the Macedonians, the Mauryas, the Bactrian Greeks, the Scythians (Śakas), the Parthians and the Kushāns; and it may be taken for granted that, with the exception of the Macedonians whose conquest was merely transitory, each of these peoples in turn left some impress upon the arts and culture of the country. Of artistic monuments, however, belonging to the Persian epoch none have yet been found either at Taxila or elsewhere in India, and, indeed, the only relic of any kind in which direct Achæmenian influence is discernible, is the Aramaic inscription mentioned on p. 90. True, there are strong Persian elements observable in the sculptures of a later epoch, particularly in those of the Gandhāra school, and it has generally been assumed

Achæmenian.

[1] For a fuller account of the evolution of early Indian art, see the writer's chapters in the *Cambridge History of India*, some paragraphs from which are here repeated.

that these elements found their way into Indian art at the time when the Persian empire extended over the North-West, the Greek elements following later. There is not enough evidence, however, to support this assumption. It may be that the fusion of Iranian with Hellenistic ideas took place in Bactria and the neighbouring countries after their colonisation by Alexander the Great, and that the hybrid art there evolved was introduced into India either as a result of the peaceful intercourse between the Maurya empire and Western Asia, or as a result of the subsequent invasions of the Bactrian Greeks, Scythians, Parthians, and Kushāns, all of whom must have been imbued to a greater or less degree with Græco-Persian culture.

MAURYAN.

During the 4th and 3rd centuries B.C., when the Mauryan power was in the ascendant, the art of Taxila partakes of the same character as the indigenous art of Hindustān, by which it was evidently much affected. This art was still in a primitive stage, but distinguished by great technical skill in the cutting and polishing of gems and by a striking refinement in the surface decoration of jewellery and terracotta-work. The rudimentary character of this indigenous art and its contrast with contemporary Hellenistic art are particularly well illustrated by the coins of the period. On the one hand, we have the Indian so called punch-marked coins, which are singularly crude and ugly, neither their form, which is symmetrical, nor the symbols which are stamped almost indiscriminately upon

their surface, having any pretensions to artistic merit. On the other hand, the coins of Sophytes (Saubhūti), who was reigning in the Salt Range at the close of the 4th century B.C., are purely Greek in style (Pl. II), having seemingly been copied from an issue of Seleucus Nicātōr, with whom Sophytes probably came into contact when the former invaded the Panjāb. This striking contrast between Indian and foreign workmanship is equally apparent in the plastic art of the period. Thus, side by side with the masterly figures, both in the round and in relief, with which some of the columns of Aśoka are crowned and which are manifestly the products of a highly mature Perso-Greek school, there are images, such as the one from Pārkham in the Mathurā Museum, which are still in the unifacial and frontal stage and exhibit all the other defects of archaic technique.

GREEK. Of Hellenistic influence during the Mauryan period—that is, before the conquest of the Panjāb by the Bactrian Greeks—some slight evidence is found on the Bhir Mound site in occasional specimens of Greek pottery, terracotta figurines, coins and gems. Such objects, however, are few and far between, and it is not until the advent of the Bactrian Greeks at the beginning of the 2nd century B.C., that Greek influence really begins to make itself felt, and even then this influence is very limited. The fact was that the new conquerors probably had little enough time to spare for the arts of peace. They built a new city at Taxila and

1&2. PUNCH-MARKED.

3&4. LOCAL TAXILAN.

5. SOPHYTES.

6. DIODOTUS.

7. EUTHYDEMUS.

8. DEMETRIUS.

9. ALEXANDER.

10. EUCRATIDES.

11. ANTIALCIDAS.

12. APOLLODOTUS.

13. MENANDER.

Coins.

laid it out on a far more regular plan than the old city on the Bhir Mound, but there is nothing typically Greek about their buildings, nor are there any remains of temples, altars, public monuments or statues such as we are accustomed to associate with the Greeks. Where Greek art manifests itself most prominently is in the coinage, the stylistic history of which is singularly lucid and coherent (Pls. II and III). In the earliest examples every feature is Greek. The standard weight of the coins is the standard established by Athens; the legends are in Greek; the types are taken from Greek mythology, and are, moreover, designed with a grace and beauty reminiscent of the schools of Praxiteles and Lysippus; and their portraiture is characterised by a refined realism which, while it is unmistakably Greek, demonstrates a remarkable originality on the part of the engravers. Later on, when the Greek power in India became consolidated, the old Attic standard gave place to one, possibly based on Persian coinage, which was more suited to the needs of local commerce; bilingual legends (on the one side in Greek, on the other in Kharoshṭhī) were substituted for the Greek; and little by little the other Greek qualities gradually faded, Indian elements being introduced among the types and the portraits losing their freshness and animation. And so the process of degeneration continued, relatively slowly among the Eurasian Greeks, more rapidly, when the Greeks were supplanted by the Scythians. The testimony of these coins is

especially valuable in this respect: it proves that the engravers who produced them were no mere slavish copyists of western models, but were giving free and spontaneous expression to their own ideas; and it proves, further, that, though Greek art underwent an inevitable transformation on Indian soil, and as a result of political changes, nevertheless its influence was long and well sustained.

Nor does this numismatic evidence stand alone: it is endorsed by other minor antiquities of this age which have come down to us, notably by gems, terracotta—work and pottery; and it may be observed, parenthetically, that it was to such small objects as these, which found their way into the distant markets of Central India and Hindustān, that the Hellenistic influence noticeable in the reliefs of the Early Indian School was mainly due.

Of the monumental records of the Bactrian Greeks in India, only one has yet been found, and that, not in Greek, but in the early Brāhmī script of India. This inscription, which was found in the ancient city of Vidiśā in Central India—1,000 miles away from Taxila—is carved on the face of a pillar, and tells us that the pillar was set up by a Greek named Heliodorus, the son of Dion, who came as ambassador to Vidiśā from Antialcidas, the Greek king of Taxila. Incidentally, this inscription shows us how the Greeks were then embracing the religions of the country of their adoption. With their very elastic

14. HERMAEUS.

15. MAUES.

16. AZES I.

17. GONDOPHARES.

18. KADPHISES II.

19. BASILEUS MEGAS.

20. KANISHKA.

21. RAJUVULA.

22. VASUDEVA.

23. WHITE HUN.

COINS.

pantheon they readily identified Indian gods with their own deities; and, just as in Italy they identified Minerva with Athena or Bacchus with Dionysus, so in India they identified the Sun-god Sūrya with Apollo and Kāma, the god of Love, with their own Eros; and they had no hesitation, therefore, in paying their devotions to Śiva or to Pārvatī, to Vishṇu or to Lakshmī.

Under the rule of the Śakas, who succeeded the Greeks in the first quarter of the 1st century B.C., the influence of Hellenism grew weaker and weaker, and such art as there was degenerated into a crude local imitation of Greek forms. But with the extension of Parthian power to India in the 1st century A.D., a fresh and powerful impetus was given to Hellenism—the most powerful, indeed, that it had yet received; for it is neither to the Bactrian Greeks nor yet to the Śakas, but to the Indo-Parthians that we owe most of the Greek influence which characterises the art of the North-West Frontier during the early centuries of the Christian era. The Parthians were not the half-barbaric people that Roman and modern historians have usually depicted. They were the heirs of two great streams of culture: of the age-old Iranian culture, on the one hand, and of the Hellenistic culture of the Seleucid Empire, on the other; and they attached more importance to the latter, not only because it was common to the greater part of their own empire, but because it represented the culture of the whole Western World. Add to this that the Parthians had in their hands the entire carrying

ŚAKAS.

PARTHIANS.

trade between the Mediterranean and Afghānistān and Northern India, and it will be readily understood how it comes about that the bulk of the monuments and antiquities in the Parthian city of Sirkap are far more Hellenistic than Indian in character, and why identically the same patterns and workmanship are found at Taxila and at places as far removed from it as Herculaneum and Pompeii.

GANDHĀRA SCHOOL.

So far as the art of Taxila itself is concerned, we can now safely say that for the first three or four centuries A.D., it owed its character to this influx of Western ideas for which the Parthians were responsible. Of the beginnings of the Gandhāra School we cannot speak with such complete assurance, because that school took shape, not at Taxila itself, but somewhere beyond the North-West Frontier—probably in the region of Swāt—where the sculptors could obtain the phyllite and other schist stones which they used for their work. Many specimens, however, of these Gandhāra sculptures have been found at Taxila, and the evidence which they supply, based mainly on the associations in which they have been discovered, points clearly to the conclusion that the inception of this school took place during the rule of the Parthians in the North-West, and was largely due to their Hellenizing tendencies. It should be added that the Gandhāra School attained its zenith under the Kushāns in the 2nd century and faded out of existence in the 3rd century A.D.

In many features, both of style and execution, the sculptures of the Gandhāra School recall to mind Roman work of the same period, and this resemblance has led some writers to suppose that Roman art and Roman culture extended their influence as far as Northern India. This idea, however, is based on a fundamental error as to the genesis of Roman Imperial art and the relation in which it stood to the Hellenistic art of Western Asia. From the time of the Seleucids onwards it was Western Asia that was the real centre of artistic effort in the ancient world. Western Asia was the crucible in which the arts of Greece and Ionia, of Persia and of Mesopotamia, were fused together; and it was from Western Asia that the streams of art flowed westward over the Roman Empire and eastward over Parthia, Turkestān and India. It is a mistake to suppose that Roman ideas affected to any great extent the plastic arts of Greece or Asia. The converse was the case, and the art of Rome, therefore, stood in much the same relation to Hellenistic art as did the art of Gandhāra. In other words, Gandhāra art was the sister (or more correctly, perhaps, the cousin), not the daughter, of Roman art, both schools tracing their parentage to the same common stock; and it is not surprising, therefore, to find that the arts of Rome and of Gandhāra were distinguished by the same family likenesses.

About 400 A.D., or a little later, there arose a new school which gave a fresh lease of life to the

dying elements of classicism. This school was equally active in the Panjāb and in Afghānistān, and may rightly, therefore, be designated the Indo-Afghān School. The important place which it occupied in the history of Indian and Central Asian art, and the wide-reaching influence which it exerted during the Early Mediæval Age, have now for the first time been made apparent by the discoveries of the writer at Taxila and by those of the French Archæological Mission in Afghānistān. Works of this school have, it is true, long been known to archæologists, but for lack of adequate data the school has hitherto been confused with the older school of Gandhāra, and no distinction made between their styles. We are now able to see by what a wide gulf the two schools are separated. What they share in common, is their heritage of classical elements and a variety of religious types and formulæ which had been largely invented by the earlier school and had become the universal stock-in-trade of the Buddhist iconographer. For the rest, they are as different in spirit and technique as they are in age and in the materials which they employ—mainly stone in the Gandhāra School, mainly stucco or clay in the Indo-Afghān School. Whereas the artists of Gandhāra had tended always to be formal and academic, their Indo-Afghān successors, when unconstrained by the trammels of religious tradition, broke out into a free and realistic mode of expression, which places their work among the most vital and vigorous products of Indian art.

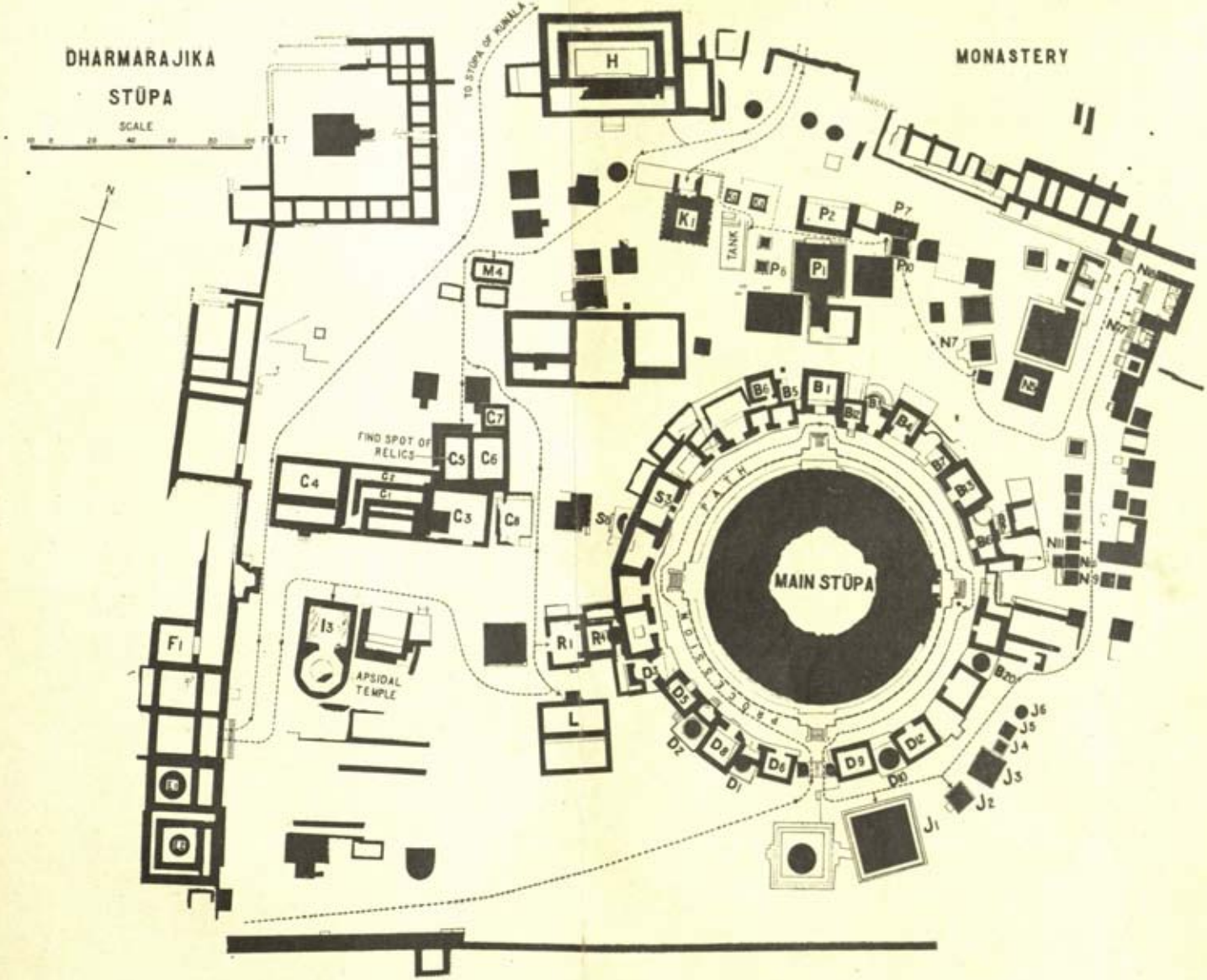
The question of the rôle played by classical art in India has been a much disputed one in the past, some authorities maintaining that it was almost a negligible factor, others that it underlay the whole fabric of Indian art. The truth, as so often happens, lies between the two extremes. In Hindustān and in Central India it played an important part in promoting the development of the Early National School, both by clearing its path of technical difficulties and by strengthening its growth with new and invigorating ideas. In the north-west region and immediately beyond its frontiers, on the other hand, it long maintained a complete supremacy, obscuring the indigenous traditions and itself producing works of no mean merit, which add appreciably to our understanding of the Hellenistic genius. Nevertheless, in spite of its persistency and wide diffusion, Hellenistic art never took the real hold upon India that it took, for example, upon Italy or Western Asia, for the reason that the temperaments of the two peoples were radically dissimilar. To the Greek, man, man's beauty, man's intellect were everything, and it was the apotheosis of this beauty and this intellect which still remained the keynote of Hellenistic art even in the Orient. But these ideals awakened no response in the Indian mind. The vision of the Indian was bounded by the immortal rather than the mortal, by the infinite rather than the finite. Where Greek thought was ethical, his was spiritual; where Greek was rational, his was emotional. And to these higher

INFLUENCE OF GREEK ART IN INDIA.

Stūpa and some smaller groups of Buddhist remains to the south-east of it then proceed over the ridge of Hathiāl to the stūpa of Kunāla and descend from there into the city of Sirkap. From Sirkap I shall conduct the visitor over the temple at Jaṇḍiāl and the remains of two small stūpas beyond it to the north. Thence we shall make our way to the city of Sirsukh and the less important monuments at Lālchak and Bādalpur; and finally we shall visit what are in some respects the most remarkable and the best preserved of all the monuments at Taxila, namely, the Buddhist stūpas and monasteries at Mohṛa, Morādu, Pippala and Jauliāñ.

The Dharmarājikā Stūpa or 'Chir Tope'[1] (Pls. IV and VII), as it is locally known from the cleft driven through its centre by former explorers, stands on a lofty plateau high above the Tamrā nālā. Such was its state of ruin fifty years ago, that Sir Alexander Cunningham affirmed that nothing but the core of the structure survived. The writer's own excavations, however, in the course of which débris to the depth of some thirty feet was removed from around its base, revealed considerable sections of the old facing in a fair state of preservation, and have brought to light a large number of other interesting structures, including stūpas, chapels and monastic quarters, which, extending as they

[1] The metalled road that has been made to the Dharmarājikā stūpa is a winding one and nearly two miles long. There is a short cut across the Tamrā nālā immediately to the east of the Bhīr mound.


DHARMARAJIKA
STÜPA
SCALE
MONASTERY
TO STÜPA OF KUNÂLA
H
K1
TANK
P1
P2
P7
P10
M4
N7
C7
FIND SPOT OF RELICS
C4
C5
C6
C3
C8
MAIN STÜPA
PATH
B1
B2
B3
B4
B5
B6
B20
F1
I3
APSIDAL TEMPLE
R1
L
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
J1
J2
J3
J4
J5
J6

do over a period of at least five centuries, furnish us with important data for the history of local architecture. Thanks, also, to the coins and other minor antiquities found in association with them, they help materially to the solution of many chronological problems connected with this period of Indian history.

THE MAIN STRUCTURE.

The main structure, as now exposed, is circular in plan with a raised terrace around its base, which was ascended by four flights of steps, one at each of the cardinal points. The core of the stūpa is of rough rubble masonry strengthened by walls, between 3 and 5 feet in thickness, radiating from the centre. These construction walls stop short above the berm of the stūpa, instead of being carried down to its foundations, and appear to belong to a subsequent reconstruction of the fabric, which took place probably during the Kushān epoch. The outer facing is of ponderous limestone blocks with chiselled kañjūr stone let in between them for the mouldings and pilasters, the whole having once been finished with a coating of lime plaster and paint. The ornamental stone carving on the face of the stūpa above the berm is best preserved on the eastern side. Its most distinguishing features are the boldness of its mouldings and the design of its niches, which are framed alternately by trefoil arches and portals with sloping jambs, and divided one from the other by Corinthian pilasters. These niches once held figures of the Buddha or of Bodhisattvas in relief. The same

kind of decoration is also found on smaller stūpas on this site belonging to the 4th and 5th centuries A.D. When the Dharmarājikā was first erected, is uncertain. Possibly it was in the reign of the Mauryan Emperor Aśoka[1] (3rd century B.C.). That it was already standing in the time of the early Śaka kings, Maues and Azes, is proved by the circle of small stūpas around it (p. 41 *infra*), which are contemporary with those rulers. But none of the visible facing is earlier than the latter part of the second century A.D., and the decoration of kañjūr stone above the berm dates probably from the fifth century.

The raised terrace and the open passage around the foot of the stūpa served in ancient days as procession paths (*pradakshiṇa patha*), round which it was customary for the faithful to ' process ', keeping the stūpa always on the right hand. Now-a-days, the Buddhists ordinarily process three times round a stūpa or other sacred edifice, but in obedience to vows they will process 7, 14 or even 108 times.

The only pavement in the procession path which is now visible is in the N. E. quadrant and is composed of slabs of dark grey slate. But below this

[1] The name *Dharmarājikā* has been thought to denote, in particular, a stūpa built by Aśoka, the Dharmarāja. But it seems more likely that it denoted a stūpa erected over a relic of the Buddha, who was the real dharmarāja, and that Aśoka only got the title of dharmarāja because he had built so many dharmarājikās. *Cf.* Konow in *Corpus Inscr. Ind.*, Vol. II, p. 75.

pavement are two earlier floors. The original one was composed of lime mixed with river sand, and part of it in the north-west quadrant was adorned in a curious fashion with shell bangles imbedded in the plaster and arranged in various geometrical designs, some of the bangles being whole, others cut in halves or in quarters.[1] Above this floor was an accumulation of débris about three inches thick, and over this, again, a second *chunam* floor. In the stratum immediately above this latter floor were found many pieces of glass tiles. Probably the whole of the procession path was at one time paved with these glass tiles, and later on, when the pavement had fallen into disrepair, a number of the tiles were removed from here to the chamber F[1], where they were found laid in a somewhat careless manner.[2]

Immediately to the left of the steps on the eastern side of the stūpa is the lower part of a pillar, which probably once supported a lion capital, like the pillars in Sirkap (p. 87). Such pillars were doubtless imitated from the well-known pillars of Aśoka, which were frequently set up beside important Buddhist stūpas.

Of the minor antiquities found in the procession—passage the only ones of interest were some Gandhāra sculptures and coins. Of the former a

[1] For the protection of this decoration, it has been covered again with a layer of earth.

[2] *A. S. R.*, 1912-13, Pt. II, p. 18. *Cf.* pp. 59-60 *infra*.

typical specimen is a figure of the Bodhisattva[1] (? Śākyamuni) standing beneath an umbrella canopy in the attitude of protection (*abhaya-mudrā*), with attendant figures. The coins were found in a hoard to the number of 355, concealed in a small block of kañjūr stone near the western steps. They comprise specimens of Azes II, Soter Megas, Huvishka, Vāsudeva and issues of Indo-Sasanian or Kushāno-Sasanian type.

SMALL CIRCULAR STŪPAS AROUND THE MAIN STRUCTURE.

The Great Stūpa described above was the first of the Buddhist structures to be erected on the plateau. At the time when it was constructed, the plateau around was levelled up and covered with a layer of grey river sand with a floor of lime plaster above. On this floor or on the débris which accumulated immediately above it there was subsequently built, in a ring around the central edifice, a number of small stūpas, of which eleven have been laid bare. In the plan on Pl. IV they are numbered, starting from the west, R^4, S^5, B^6,

[1] Bodhisattva means literally a being whose characteristic (*sattva*=Pāli *satta*) and aim are enlightenment (*bodhi*). Gautama was a Bodhisattva in his previous existences and also during his historical existence up to the time when he attained enlightenment and became the Buddha. According to the Northern or Mahāyāna School of Buddhism, there are, besides Gautama, innumerable other Bodhisattvas, both human and divine, among the best known of whom are: Avalokiteśvara, Mañjuśri, Mārīchi, Sāmantabhadra, Vajrapā and Maitreya, the last of whom is the coming and last Buddha of this age of the world.

B^3, B^7, B^{16}, B^{20}, B^{10}, D^1, D^2, and D^3. These small stūpas, which date from the Śaka period (1st century B.C.), were originally circular in plan and constructed of rough rubble cores generally faced with square kañjūr blocks, the only existing decoration being a simple base moulding. Later on, some of them, *e.g.*, D^3 and R^4, were enlarged by the addition of square or round bases. In several of these stūpas, buried at a depth of five or six feet beneath their bases, were found relic deposits of which the two following may be taken as typical examples:—

In B^3 the relic chamber, roughly constructed of small stones and covered by a large slab of limestone,[1] contained a casket of steatite and a miniature stūpa of fine grey limestone. Inside the casket, which is 4 in. high and well-turned on the lathe, was a smaller casket of silvery bronze, $1\frac{3}{8}$ in. high, in the form of a stūpa crowned with umbrellas; and in this miniature receptacle were some calcined bones and ashes, and a few gold, agate, pearl and bone beads. The stūpa of grey limestone is provided with a small cavity underneath, in which were packed together a large assortment of interesting beads and gems of the following materials:—ruby, crystal, banded agate, jacinth, sard, garnet, amethyst, cornelian, aquiamarinte, green jasper, onyx, mother-of-pearl, glass, yellow quartz and bone. Some of these beads are in the shape of animals or birds, such as the lion, tortoise, frog and goose;

[1] This stūpa is no longer exposed to view.

others are in the form of a crescent or *triratna*[1]; others are barrel-shaped, polygonal or amygdaloid. From the shape of the little limestone stūpa and of some of the beads contained in it, it seems probable that it formerly belonged to an older structure, and that it was transferred to the one in which it was found when its original resting place had fallen into disrepair.

In the relic chamber of another stūpa (S^5) were four small earthenware lamps—one in each corner of the chamber—four coins of the Śaka kings, Maues and Azes I, and a vase of steatite. The vase contained a miniature casket of gold together with three gold safety pins, and some small beads of ruby, garnet, amethyst and crystal; and inside the miniature gold casket, again, were some beads of bone and ruby with pieces of silver leaf, coral and stone, and along with these the bone relic. In February, 1917, these relics were presented by the Viceroy, Lord Chelmsford, to the Buddhists of Ceylon and were enshrined by them in the Temple of the Tooth Relic (Dalada Maligawa) at Kandy.

CIRCLE OF SMALL CHAPELS.

The next stage of building around the Great Stūpa is marked by the erection of a circle of small chapels which are similar in plan, as well as in purpose, to those at Jamālgaṛhi in the Frontier Province, being intended for the enshrinement of Buddhist images which were set up facing the Great

[1] *Triratna* = 'Three jewels.' The trident device symbolises the trinity of Buddhism: the Buddha, the Dharma (Law) and the Saṅgha (Religious Order).

Stūpa. Now-a-days, it is against the Buddhist principles to destroy a stūpa or any other work of merit, and it may be presumed that the same idea prevailed among the Buddhists in ancient times. Accordingly, when these chapels were built, the small stūpas then standing, although much decayed, were suffered to remain, the ground between them being partially filled in with débris and the walls of the new chapels carried over their tops.

Consecutive types of Masonry.

The earliest of these chapels which date from the first century A.D., are built in a very distinctive style of masonry known as 'diaper', which had probably been introduced by the Parthians from the North-West Frontier. At the period to which these chapels belong the diaper was characterised by the neatness of the piles of small stones in the interstices between the larger boulders. Among the many chapels in which examples of this masonry may be seen, are B^6, D^{12}, D^9, D^6, D^5, R, S^6 and S^5.

With the lapse of time these buildings in turn fell to ruin, the spaces between became filled with fallen débris, and over this (at a height, that is to say, of several feet above the original floor) were constructed other chapels in still another kind of masonry. This later masonry, which is the third distinct variety employed on the site, is characterised by the use of ashlar and diaper masonry combined, and appears to have been in vogue in the 3rd, 4th and 5th centuries A.D. It is used for the repair of the upper parts of the earlier chapels as well as in

the construction of new ones, *e.g.*, B^1, and B^{13}. In the earlier examples of this semi-ashlar masonry a single course of ashlar is usually inserted between the larger boulders; in the later examples, the single course is replaced by two or even three courses.

Thus, we have three clear and distinct types of masonry immediately around the Main Stūpa (Pl. V): first, the rubble and *kañjūr* work of the Śaka period; secondly, the neat diaper which came into fashion with the Parthians during the 1st century A.D.; and thirdly, the semi-ashlar, semi-diaper type of the late second and subsequent centuries. These three consecutive types are equally well illustrated in other buildings at the Dharmarājikā Stūpa as well as in Sirkap and other places.

MINOR ANTIQUITIES FROM CHAPELS ROUND MAIN STŪPA.

The antiquities found in the chapels round the Main Stūpa came mainly from the highest stratum and consist for the most part of stucco and terra-cotta figures, of which some fine examples may be seen in the museum.

In chapel S^3, in its south-west corner, are the remains of a raised platform, the body of which is composed of mud. Buried in the mud were found a large number of clay sealings impressed with the Buddhist creed—*Ye dharmā hetu prabhavā*, etc.,—in characters of the Gupta age. Such seals are frequently found imbedded in ancient Buddhist stūpas and even in statues.

The visitor who has followed the route indicated on the plan in dotted lines will have entered the

(*a*)

(*b*)

(*c*)

(*d*)

CONSECUTIVE TYPES OF MASONRY.

procession path by its southern entrance, will have performed the *pradakshiṇa* around the Great Stūpa, and will now emerge again by way of the same entrance. As he turns to the left, he will see near by and on his right hand a stūpa of considerable size designated J^1 in the plan. It consists of a square base, 32 ft. 4 in. square, composed of three tiers, which diminish in size as they rise. Above this base was formerly a circular drum and dome crowned by the usual umbrella, but all traces of these features have now vanished. This stūpa appears to have been erected originally in the late 2nd Cent. or possibly early 3rd Cent. A.D., and to have been extensively reconstructed in the 5th Cent. A.D. To the earlier period belongs the decoration of the lowest tier on the north side, consisting of groups of figures separated from one another by stunted Corinthian pilasters. The figures are executed in stucco, with which material the whole face of the stūpa was finished off, and represent seated Buddhas accompanied by a devotee standing on either side. When the stūpa was repaired, these groups of figures had already suffered damage, and the frieze above them was then lowered from its position over the capitals of the pilasters, and set in a line with them, thus resting on the shoulders of the Buddhas from which the heads had disappeared. At the same time a new series of pilasters was introduced on the eastern and southern façades of a more stunted form and surmounted with notched brackets let in between the capitals and the frieze. On these two sides there are now no figures of the Buddha.

STŪPA J^1.

To the later repair, also, appears to belong the decoration on the second tier. It consists of a row of the foreparts of elephants alternating with pairs of Atlantes, the grotesque attitudes and late and very decadent modelling of which are noteworthy.

Stūpa J^2. A little further eastward is the stūpa J^2, in which some relics of interest were found. The relic chamber was at a height of 2 feet above the floor-level and in the centre of the structure. In it was a steatite casket shaped like a Greek *pyxis*, which contained a small box of silver; and in this, again, was a still smaller box of gold containing some minute fragments of bone. There were also a few beads in the steatite casket, but no coins with which to fix its date. The shape of the steatite casket resembles that of a casket discovered by the writer some years ago at Charsadda, which dated from the time of Zeionises[1] (middle of 1st century A.D.), and this may be the approximate age of this deposit, though the stūpa itself is probably later.

Stūpas N^{9-1}. Passing by the stūpas J^{3-6} and proceeding in a northerly direction, we come to another group of similar monuments, all of which are built in the semi-ashlar type of masonry, are square in plan, and standing to a height of some three feet or less. In the centre of N^{11} was found a large earthen *ghaṛā* of plain red earthenware containing fifteen copper coins of Shāpur II (309-379 A.D.). Another earthenware vessel which was discovered in Stūpa N^{10} had been badly crushed, but the earth from it

[1] *A. S. R.*, 1902-03, Pt. II, pp. 175-176.

yielded 18 beads of coral, lapislazuli, shell and glass. The Stūpa N^9 yielded a few beads only.

A little further on is a wide passage flanked on either side by stūpas and chapels, which leads to the monastic quarters on the north. Of the chapels alongside this passage, the two numbered N^{17} and N^{18} are still quite imposing even in their ruin. They are constructed of particularly massive semi-ashlar masonry and date from the fourth or fifth century A.D. Inside are the remains of several images of Buddha, of which the principal ones facing the entrances were of colossal proportions. Of the one in N^{18} only the feet and lower part of the raiment have survived, but the size of the former (5 ft. 3 in. from heel to toe) indicate that the figure had an approximate height of 35 feet; and it follows, therefore, that the chapel itself must have been hardly less than 40 feet high. The core of these images, as of others of the same age, is composed either of kañjūr stone roughly fashioned to the shape of the figure, or of mud, or of mud and stones combined; the stucco coating in which the features and other details are made out, is almost pure lime. In several instances red paint is still adhering to the robes of the statues, and no doubt other pigments, as well as gilding, were employed for their decoration. Observe the excellence of the modelling in the feet of some of the smaller figures. Of the heads and hands belonging to these statues several were found amid the charred débris of the chapels. One of these heads, $13\frac{1}{4}''$

CHAPELS N^{17} AND N^{18}.

high and of the conventionalised type, evidently belonged to one of the standing figures in chapel N^{17}.

STŪPA N^7. Retracing our steps and turning westward past stūpa N^5 we come to the little stūpa N^7, which is built on the ruins of an older monument. In its relic chamber, which was constructed of neat kañjūr stones, was found a crystal lion, and beneath it, a casket of Gandhāra stone containing a small box of silvery bronze with some minute bone relics within, accompanied by two small pearls and one bead of bright blue paste.

In the narrow space between P^7 and P^{10} was a broken Gandhāra sculpture representing the offering of honey by a monkey to the Buddha, and a little below it was a small earthern pot containing five gold coins of the later Kushān period, one solid gold ear-ring with pearls attached to it, a few gold beads, plain and fluted, and a broken ornament of beaten gold with a granulated border. This deposit seems to have been placed here after the adjacent buildings had become buried in débris.

BUILDINGS P^1 AND P^2. A little to the west of this point the visitor passes through a narrow passage between the buildings P^1 and P^2. The former of these was a stūpa of the early Kushān period, the latter a chapel in the later style of masonry. In this passage are two colossal Buddhas side by side, seated on a stone plinth. Their hands rest in the lap in the attitude of meditation (*dhyāna-mudrā*), but their heads, unfortunately, are missing.

CENTRAL ARCHAEOLOGICAL LIBRARY

TANK.

In the open space into which we now emerge is a tank with four small stūpas on its northern and eastern sides. The tank itself is built of rubble masonry such as was in vogue during the Scytho-Parthian period, and it had evidently fallen into disuse and been filled in before the small stūpas were erected, since the foundations of two of the latter (K^2 and K^3) project well over the northern end of the steps which descend into the tank. In stūpa K^3 was found a relic-vase containing ashes and three coins of Kanishka, and in the stūpa P^6, which is approximately contemporary with it, was another earthen vase and ten coins of Huvishka and Vāsudeva, five of which were found inside the vase along with some ashes, and five outside. It is noteworthy that these stūpas, like the larger one (K^1) near by, are of semi-ashlar masonry faced with kañjūr, not, as might be excepted, of diaper masonry.

STŪPAS K^2 AND P^6.

On the west side of the tank, the Stūpa K^1 is also worthy of notice. Observe in particular the seated image of the Buddha in the niche on the northern side, and also the cornice and other details of a distinctively Hellenistic character.

STŪPA K^1.

On to the north side of this stūpa were subsequently built several small chambers, probably chapels, facing north. They stand on a common base adorned with a row of stunted pilasters alternating with niches of the same design as those above the terrace of the Main Stūpa, namely, trefoil arches and doorways with sloping jambs in which figures of the Buddha were placed.

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VIEW OF THE SITE AND THE SURROUNDING COUNTRY.

From this point it is well worth while to ascend the higher ground to the north and take a bird's-eye view of the whole site and of the surrounding country (Pl. VII). When excavations were first started, the ground-level around the stūpa area was little lower than this elevated plateau, and standing on the edge of the latter we get a good idea of the amount of débris that had to be shifted before the many buildings below us could be exposed to view. The point to which this débris rose around the Great Stūpa is still clearly visible on the sides of the structure itself.

MONASTERY.

The remains that are now (1934) being exposed to view in this quarter of the site are part of a large monastery, or rather succession of monasteries (for there are several such, erected one on the ruins of another), which were attached to the Great Stūpa. If the visitor will look around him, at the other eminences in the valley, he will see that many of them are crowned by groups of ancient ruins, and he will observe that in each group there is a circular mound standing side by side with a square one. In each case the circular mound covers the remains of a Buddhist stūpa, and the square one adjoining it the remains of a monastery. So it was at the Dharmarājikā Stūpa, the chief monument of its kind at Taxila; quarters for the monks were provided in close proximity to the sacred edifice, and it is clear from the courts already excavated that this monastery was planned on the same lines as other monasteries of the same age at Taxila, *e.g.*, those at Mohṛā Morādu and Jauliāñ (Ch. X).

It consisted, that is to say, of several square courts open to the sky and encompassed by rows of cells in two storeys, with verandahs in front; and it was provided, no doubt, with a Hall of Assembly, refectory and kitchens. The monastery was destroyed and rebuilt on several occasions, but most of the remains now visible belong to the early Mediæval Period. A number of skeletons found in them are probably those of monks or nuns killed by the Huns in the latter half of the 5th century A.D., when all the monasteries of Taxila were destroyed.

Building H^1.

Descending again to the lower level we pass, on our right hand, the shrine H^1, which was probably intended for an image of the Dying Buddha. This building exhibits three types of masonry, representing three different periods of construction. In the original shrine the stonework is of the rubble variety which prevailed in the Scytho-Parthian period, but subsequently this shrine was strengthened and enlarged by the addition of a contiguous wall in the diaper style, as well as of a second wall enclosing a *pradakshiṇa* passage and portico in front. Later on, when the level had risen several feet, additions in semi-ashlar masonry were made, and other repairs were carried out at a still later date. The only minor antiquities of interest in this building were 28 debased silver coins of the Greek king Zoilus, which were brought to light beneath the foundation of the earliest chapel.

Two pits M^4.

The two small pits M^4 are of interest only as affording some slight evidence as to the age when

the Gandhāra School of Art was flourishing. They were used for the mixing of lime stucco and their floors were composed of Gandhāra reliefs laid face downwards. As the reliefs in question were already in a sadly worn and damaged condition when they were let into the floor, it may safely be inferred that a considerable period—say, a century or more—had elapsed between the time when they were carved and the construction of the pits, which from the character of the walls appears to have taken place in the 4th or 5th century A.D. Evidence of a similar character was also obtained from the chamber B^{17} on the eastern side of the Great Stūpa.

CHAPELS G^{1-8}.

The complex of chambers G^1 to G^8 comprises chapels erected at different periods and in different styles of masonry. From an architectural point of view they are in no way remarkable, but the chapel G^5 merits notice, because it was here that one of the most interesting relics yet discovered in India was unearthed. The find was made near the back wall of the chapel, opposite the Main Stūpa, and about a foot below the original floor. It consisted of a steatite vessel with a silver vase inside, and in the vase an inscribed scroll and a small gold casket containing some minute bone relics. A heavy stone placed over the deposit had, unfortunately, been crushed down by the fall of the roof, and had broken both the steatite vessel and the silver vase, but had left the gold casket uninjured, and had chipped only a few fragments from the edge of the scroll, nearly all of which were luckily recovered (Pl. VI).

DHARMARĀJIKĀ STŪPA: SILVER SCROLL INSCRIPTION AND TRANSCRIPT.

The inscription, which is in the Kharoshthī character and dated in the year 136 (circa 78 A.D.), records that the relics were those of the Lord Buddha himself. It reads as follows:—

INSCRIPTION OF THE YEAR 136.

L. 1. *Sa* 100. 20. 10. 4. 1. 1. *Ayasa Ashaḍasa masasa divase* 10. 4. 1., *iśa divase pradistavita Bhagavato dhatu*[*o*] *Ura*[*sa*]—

L. 2. *kena* [*Iṁ*]*tavhria-putrana Bahaliena Noachae nagare vastavena tena ime pradistavita bhagavato dhatuo dhamara*—

L. 3. *ie Tachhaśie tanuvae Bodhisatvagahami maharajasa rajatirajasa devaputrasa Khushanasa arogadachhinae.*

L. 4. *sarva-budhana puyae prachega-budhana puyae araha* [*ta**]*na puyae sarvasa* [*tva**] *na puyae mata-pitu puyae mitra-macha-ñati-sa-*

L. 5. *lohi*[*ta**]*na puyae atmano arogadachhinae nianae hotu a*[*ya*] *de samaparichago.*

"In the year 136 of Azes, on the 15th day of the month of Āshāḍha, on this day relics of the Holy One (Buddha) were enshrined by Urasaka, scion of Iṁtavhria,[1] a Bactrian, resident of the town of Noacha. By him these relics of the Holy One were enshrined in his own Bodhisattva chapel at the *Dharmarājikā stūpa* at Takshaśilā, for the bestowal of health upon the great king, king of kings, the Son of Heaven, the Kushāna; in honour of all Buddhas; in honour of the individual Buddhas; in

[1] Perhaps Intaphernes, but the reading is doubtful.

honour of the Arhats; in honour of all sentient beings; in honour of (his) parents; in honour of (his) friends, advisers, kinsmen, and blood-relations; for the bestowal of health upon himself. May this thy right munificent gift lead to Nirvāna."[1]

Relic caskets in G[4].

In the chamber G[4], on the highest floor level, were numerous kañjūr blocks belonging to a small stūpa. These blocks were scattered in a heap on the floor, defying any attempt to reconstruct from them the design of the stūpa from which they had fallen. In one of the blocks were found two relic caskets of steatite. One of the caskets contained a smaller one of ivory, and in the latter was a still smaller one of gold adorned with rough geometric and floral designs. Inside this gold casket were a piece of calcined bone, a small gold bead, and a number of small pearls of various sizes and shapes. In the other casket, which was shaped like a Greek *pyxis*, was a smaller silver box roughly ornamented and containing a smaller golden casket with some thin gold leaf and two pieces of calcined bone inside.

Chapel R[1].

The small circular stūpa R[4] was, as stated above, repaired and enlarged on several occasions. The first addition made to the original structure was a square base of neatly cut kañjūr blocks adorned

[1] This inscription was first published by the writer in *J. R. A. S.*, October 1914, pp. 973-86. *Cf.*, also, *J. R. A. S.*, 1915, pp. 155 ff, 191 ff, 314 ff; *J. A.*, XI, V, pp. 281 ff; *Ind. Ant.*, 1916, pp. 120 ff; *S. B. A. W.*, 1916, pp. 787 ff; *Ep. Ind.*, Vol. XIV, pp. 284 ff, and Corpus Inscr. Ind. Vol. II, Pt. I, pp. 70-77, where the inscription is examined with great erudition by Professor Sten Konow.

with slender pilasters of the Corinthian order and a simple dentil cornice. Then came the two small square projections on the western face of this base; and at the same time a shallow portico or chapel was formed against this western face by running out two short walls from the north-west and south-west corners of the stūpa. Subsequently, but probably not much later, this portico or chapel was enlarged to about double its size by a further addition on the west. Particularly worthy of notice are the well-proportioned though much damaged reliefs in the Gandhāra style which adorn the small recesses between the projections and side walls. One of them—on the south face of the south projection—portrays the departure of Gautama from Kapilavastu, accompanied, as usual in the Gandhāra School, by the *vajra*-bearer. The other—on the northern face of the northern projection—portrays the horse Kaṇṭhaka taking leave of his master. The animal is kneeling to kiss the feet of Gautama, while Chandaka and another figure on the one side, and the *vajra*-bearer on the other, look on.

Besides these reliefs, numerous stucco and terra-cotta heads were found in the débris which had accumulated in and around this chapel.

BUILDING L.

The building L, which stands immediately to the south of R[1], was a double-chambered chapel standing on a high plinth, access to which was provided by a flight of steps on the northern side. All that is now left of it is the plinth walls constructed of large diaper masonry of the late Parthian or early

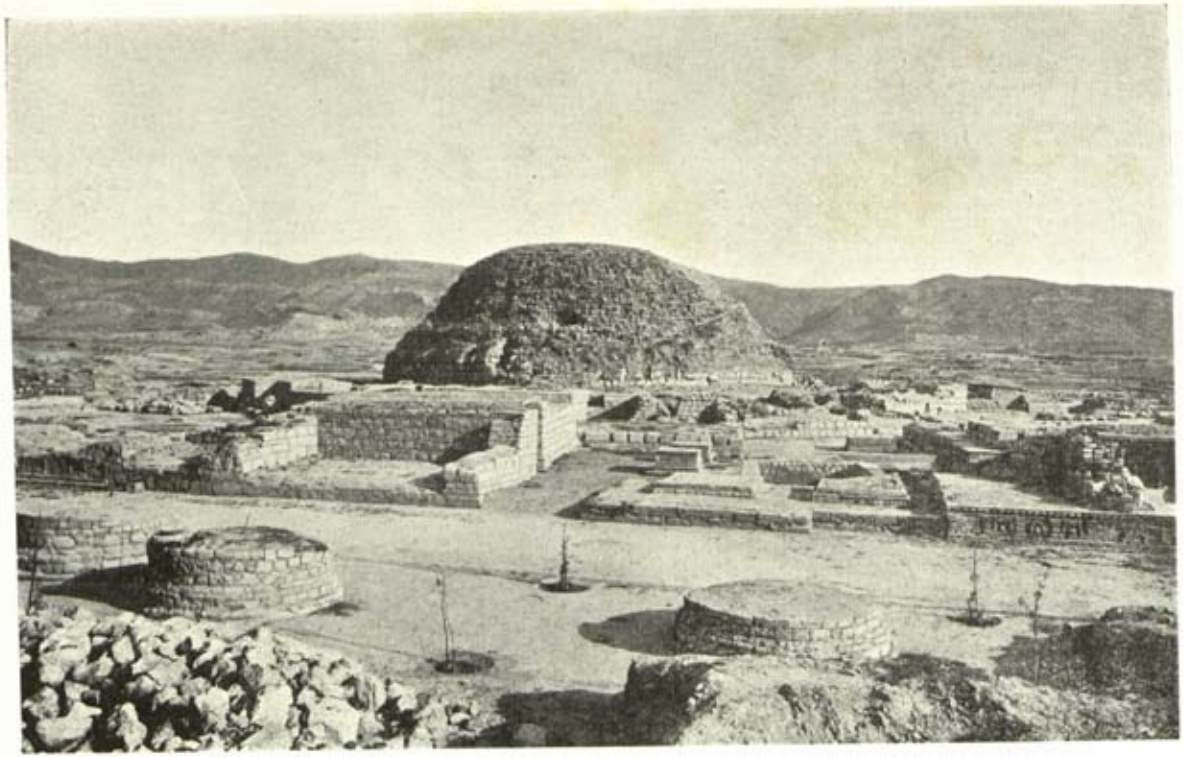
Kushān period, but round about the building were found numbers of Gandhāra stone reliefs which had evidently been dedicated from time to time and placed in this chapel.

In spite of the large number of Gandhāra sculptures recovered, the inscribed records on them are rare and fragmentary. The most interesting is one engraved in Kharoshṭhī letters on the side of a stone lamp, which records that it was the gift of the friar Dharmadāsa, in the Dharmarājikā Compound of Takshaśilā.[1]

APSIDAL TEMPLE 1[3].

On the western side of the site the most striking edifice in old days must have been the apsidal temple or 'Chaitya Hall,' where the faithful came together for their devotions. It dates from Kushān times and is built of the same variety of large diaper masonry as that used in building L. In plan, the temple is generally similar to the 'Chaitya Halls' excavated in the hill-sides at Kārlī, Ajaṇṭā, Ellora and other places in Western and Central India, but in this case the interior of the apse is octagonal instead of round. Inside the apse are the remains of an octagonal stūpa of kañjūr stone, 2 ft. 6 in. below the base of which is a floor which must have been laid before the apsidal temple was built. From what remains of the nave, it appears to have consisted of nothing more than a passage corresponding in width with one side of the octagon and flanked by very thick walls on

[1] *Cf. Corp. Inscr. Ind.* Vol. II, p. 90.



View of Dharmarājikā Stūpa from north.

either side. The temple is of special interest as being one of the very few structural buildings of this kind known to exist in India, and the first to be discovered in Northern India. Since its excavation, however, another and more imposing example has been found in the city of Sirkap (pp. 94-97).

The last of the structures which we shall notice on this site is the range of small chapel cells (E and F^1) on the western edge of the plateau. The cells are raised on a plinth about 4 feet high and ascended by flights of steps on their eastern side. In two of them, namely: E^1 and E^2, are the solid foundations of circular stūpas descending to a depth of 10 ft. below the plinth level and evidently intended for the support of a heavy superstructure. A similar stūpa, with its superstructure still intact, has been found in one of the cells of the monastery at Mohṛā Morādu (pp. 123-24). CHAPELS E AND F^1.

In another of the chambers, F^1, was a floor of glass tiles of bright azure blue with a few other colours—black, white and yellow—mixed with them. These tiles average $10\frac{1}{4}$ in. square by $1\frac{1}{8}$ in. thick and are of transparent glass, the first complete specimens of their kind which have yet come to light in India. In connexion with these tiles it is interesting to recall the Chinese tradition that glass making was introduced into China from Northern India. The tiles were found laid in a somewhat careless manner on a bed of earth, and it was evident that they were not occupying the position for which they were originally intended,

which may have been the procession path of the Main Stūpa[1].

From the Dharmarājikā Stūpa the visitor who is pressed for time or does not like walking, can drive back by road to the museum and thence to the city of Sirkap and the Kunāla Stūpa; or, if he prefers it, he can reach the Kunāla Stūpa on foot by a path which leads northwards from the Dharmarājikā Stūpa and passes through a defile in the Hathiāl ridge, thence descend into Sirkap and so rejoin his car or tonga at the north gate of the city; or, thirdly, he can make a further excursion across the fields to an interesting group of Buddhist remains in the glen of Giri behind the villages of Khurram Prāchā and Khurram Gujar. If he follows the second course, the walk to the Kunāla Stūpa, which is rough and stony, will take about half an hour. To Giri the distance is about three miles.

[1] *Cf.* p. 41, *supra*.

CHAPTER V

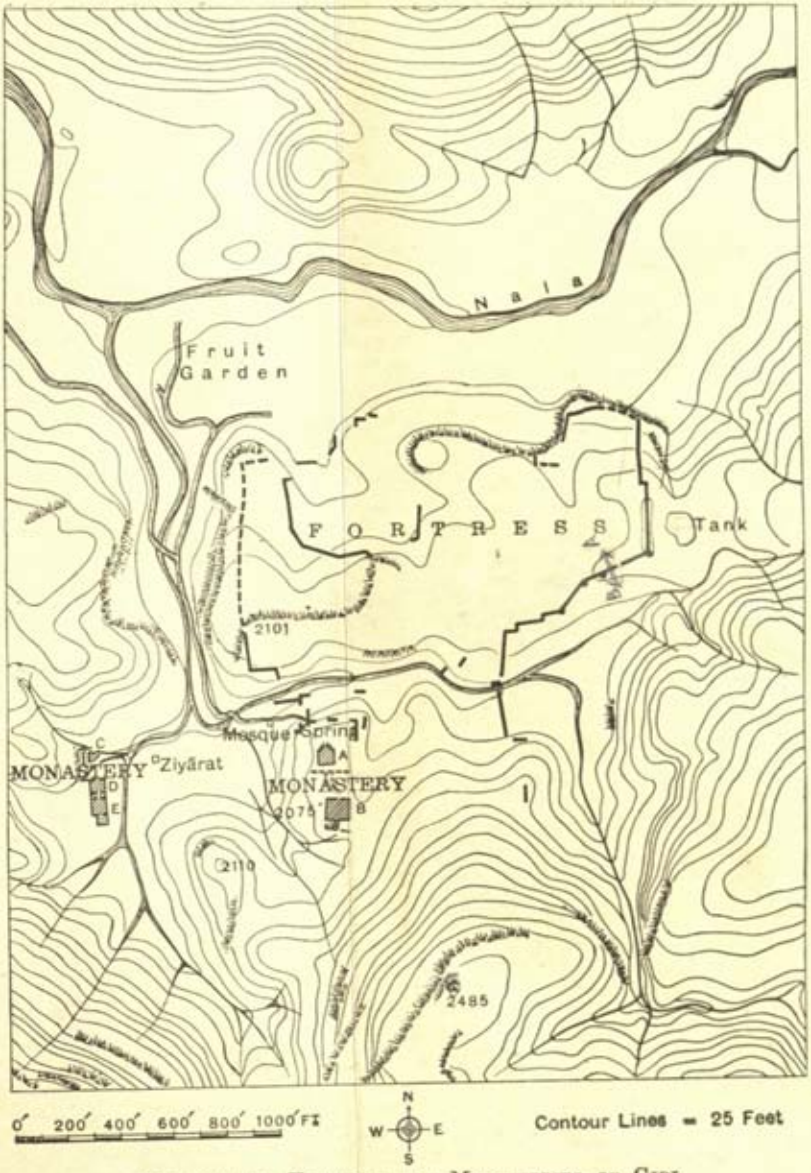
Buddhist remains in the glen of Giri

Position of Giri.

Looking E.-S.-E. from the Dharmarājikā Stūpa the two villages of Khurram Prāchā and Khurram Gujar can be seen nestling into the hillside at the foot of the Margalla spur. Between these villages a rocky defile through the hills leads to a small secluded valley and thence by way of a rough torrent bed to the glen of Giri, where there is a perennial spring of excellent water and, near by, a Ziārat. Above this glen the hills of the Margalla spur rise some 1,500 feet on the south, but not more than 400 to 500 feet on the other sides. Such a spot, shut off from the world, protected from the winds, and provided with an ample supply of running water, must have been irresistibly attractive to the Buddhists, and it is not surprising, therefore, to find here the ruins of two considerable groups of stūpas and monasteries —one on a terrace immediately above the spring, the other on the lower ground a couple of furlongs to the west. These Buddhist monasteries and stūpas, however, are not the only remains that invest this spot with interest. On the south side of the valley and between it and the glen of Giri is a rocky hill over 500 yards in length from east

FORTRESS OF GIRI.

to west by half as much from north to south, which is detached from the main spur by a steeply scarped *nāla* on the west, a more open depression on the south and a shallow saddle on the east, while on the north are steep bluffs alternating with more gently-sloping bays. In old days this naturally strong position was further strengthened by a bastioned wall, of which a considerable section, some 550 yards in length, can still be seen in a ruined condition at its eastern end, while other short sections are traceable here and there over the western half of the hill-top. Along the south side this wall is between 10 and 11 feet in thickness and faced with a late type of semi-ashlar masonry. Not far from the S.-E. corner is a narrow gateway. The bastions, which are semi-circular in plan, are placed at regular intervals along the curtain of the wall, as well as at the salient and re-entrant angles. In front of the curtain is a plinth intended probably to protect the base of the wall against undermining. Of the fortifications on the opposite hill to the south only a short section is now traceable. They are clearly defined at the point where they cross the ravine and for a space of about 180 feet beyond, where they turn eastward around the shoulder of the hill, but from there onwards their alignment is uncertain. It is clear, however, that they must have embraced within their circuit the all-important spring of water higher up the ravine towards the west, and it is not unlikely that they also took in the monastery area A-B. Inside these fortifications the hill-top is rugged and uneven to



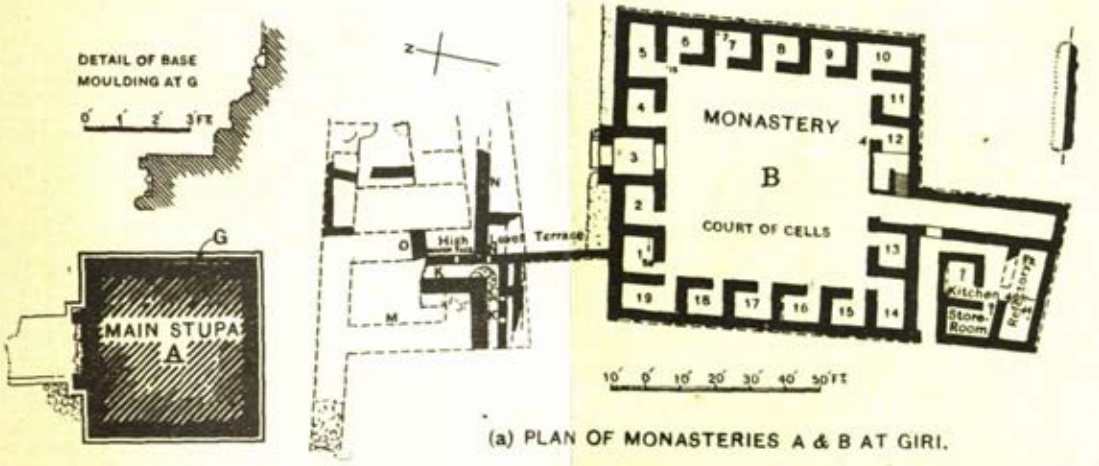
Plan of the Fortress and Monasteries of Giri.

a degree and for the most part quite denuded of earth. The remains of dwellings and other structures are everywhere in evidence, but potsherds and the like are not in such quantities as might be expected, if this stronghold was in occupation for any length of time. For these reasons, coupled with the remoteness of the spot, it may be inferred that the stronghold was intended as a place of refuge in times of need, chiefly, one surmises, for the protection of the large bodies of Buddhist monks living at the Dharmarājikā and neighbouring monasteries. In the Khurram valley alone more than a score of these monasteries are still traceable on mounds round about the Dharmarājikā Stūpa or further to the east; and there were many more on the ridges to the north and south. It is highly probable, too, that this Giri stronghold was used by refugees from the many monasteries on the further slope of the Hathiāl spur, including Jauliāñ, Mohṛā Morādu and Bajrān, who on the occasion of hostile invasions might easily have found themselves cut off from the city of Sirsukh. In the fifth century A.D., from which this stronghold appears to date, the whole body of monks in the environs of Taxila must have run into many thousands, and, even assuming that they could have taken refuge inside the city, they may have had strong reasons for preferring to defend themselves in a fastness such as that of Giri, which might well escape the full force of an invasion and from which, if necessary, they could beat a retreat into the higher hills of the Murree range. Towards the close of the

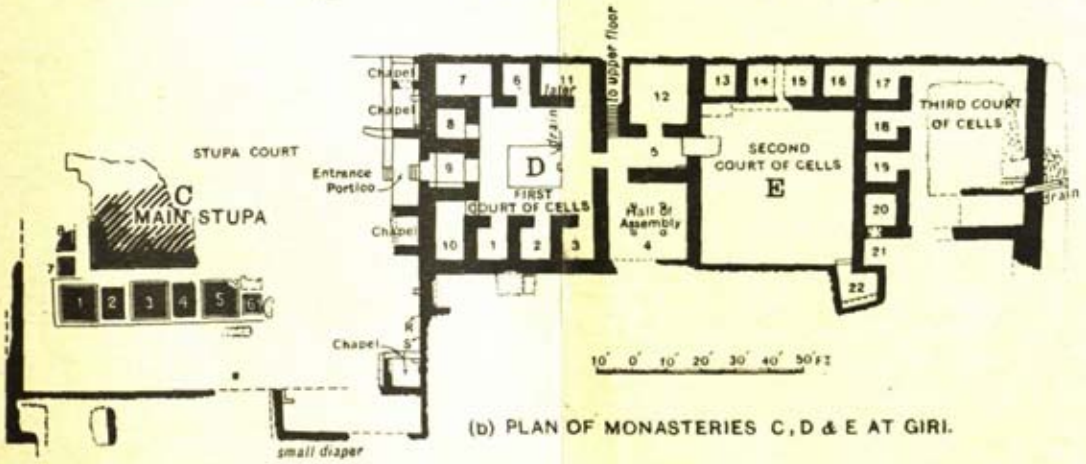
fifth century the Buddhists especially were hard put to it to escape the fury of the White Huns, who were then overrunning the North-West of India, and this stronghold of Giri affords interesting evidence of the imminent dangers to which the monks were then exposed.

MONASTERY A-B. Of the two groups of monastic buildings at Giri (Pls. VIII and IX) the larger (A-B), which, as stated above, stands on a projecting terrace just above the spring, covers an area of 120 yards from north to south by 60 yards from east to west. To the north is a large stūpa; to the south, a monastery with some 20 apartments on the ground floor; and in the space between them, a complex of walls which have only been partially excavated but which may be assumed to have belonged to a chapel court. The stūpa, which measures 62 feet square and rises to a height of about 15 feet, is in a very dilapidated condition. Its core, as usual, is of heavy rubble and its facing of kañjūr stone finished off in plaster. All that is now left of the basement consists of a low plinth relieved by a line of dwarf Corinthian pilasters and a tier above it, no more than 1′ 6″ in height, which is disproportionately small for so big an edifice. From the fact that no fragments of stucco reliefs were found in the débris round the stūpa, it may be inferred that its walls were devoid of ornament.

The monastery B, which is somewhat exceptionally well preserved, especially on its southern side, is of semi-ashlar masonry of a decadent type, and, so far as the main court is concerned, planned



(a) PLAN OF MONASTERIES A & B AT GIRI.



(b) PLAN OF MONASTERIES C, D & E AT GIRI.

on the usual lines. Ranged about the four sides of this court are 18 cells, some of which are provided with wall niches; in the middle of the northern side is an entrance vestibule, and in the southern a passage leading to what are presumably the kitchen and dining rooms, as well as to the stairs by which the upper floor was reached. The disposition of this part of the monastery is unusual. In other contemporary monasteries, like those of Jauliāñ and Mɔh ā Morādu, there was, in addition to the Court of Cells, a Hall of Assembly, a kitchen (generally with a scullery and store-room attached) and a refectory. But in planning this monastery at Giri difficulties were experienced owing to the constricted area and uneven character of the rocky ground. Thus, at the back of the three cells numbered 10, 11 and 12 on the plan, where the Hall of Assembly ought naturally to have been placed, there is an outcrop of rock which it would have taken immense labour to remove. To get over the difficulty, this outcrop appears to have been levelled up to the height of the first floor, and it is probable that the Hall of Assembly was built on its top, though all remains of it have now disappeared; while in order to provide direct access to this hall as well as to the upper-storey cells, a stairway was constructed on the east side of the passage alluded to above. The passage itself was roofed by means of a corbelled vault, two courses of which are still in place, and received light and air through a window at the southern end. In its west side is a doorway, with its corbelled arch

intact, through which the group of rooms comprising the kitchen and refectory were reached. The room which appears to have served as the refectory, is unduly small, but would have sufficed to seat between 20 and 30 monks. The two other rooms resemble ordinary cells, but their position leaves little doubt that they served as kitchen and scullery. The passage on the north of No. 19 leads to a small side entrance like the one in the kitchen quarters of the monastery at Jauliāñ.

Of the complex of structures between the Stūpa Court and the Monastery only a small section has been cleared, and the plan has yet to be made out. The minor objects recovered from this group of buildings comprised iron nails, fish-plates, hinges, clamps, arrow-heads, needles, a sickle, copper rings, handles of bells, antimony rods, glass and ivory bangles, and stone beads.

Monastery C, D, E.

The other monastic settlement (C, D, E) is set on a raised terrace at the western end of the glen, with the hillside sloping steeply down to it on the west and a torrent bed skirting it on the south and east—a position that has proved anything but favourable to the preservation of the buildings, since the torrent has shorn away a large part of the eastern side of the site, and floods sweeping down the hillside have cut across the stūpa court.

Unlike the larger monastery described above, this one is constructed mainly of diaper masonry of the Late Parthian or Early Kushān period, but has undergone extensive reconstruction in semi-

ashlar masonry of a late type. Of the Main Stūpa, which stands on the northern side of the monastery, less than a quarter is now standing, the other three quarters having been washed away by floods. From the little that remains, however, it is evident that its plinth was a square of about 60 feet each way, with an ascending flight of steps in the middle of the northern side. Each face is relieved by a line of Corinthian pilasters standing on a moulded base and finished with plaster reliefs. The pilasters, cornice and base are of kañjūr stone, the panels between of limestone diaper masonry repaired in semi-ashlar, and the core of rubble. A large number of plaster reliefs, in more or less broken and fragmentary condition, were found lying at the foot of the stūpa on its western side. In style, they approximate to the later sculptures from Jauliāñ and Mohṛā Morādu, and evidently belong to the period of the later reconstruction. Among them was a colossal head of a Buddha image which lay between the subsidiary structures 2 and 3 on the west side, and a colossal hand, possibly belonging to the same image, which was only a few feet away in front of the third panel from the north-west corner. A third figure, when first excavated, looked curiously like a caricature; for the head of a life-size image, which adorned the drum of the stūpa, had slipped into an almost natural position on the body of a much smaller one, and gave it a singularly grotesque appearance.

Parallel with the west and the north sides of the Main Stūpa, at the north-west corner, is a row

of subsidiary structures numbered from 1 to 8 in the plan. Of these, Nos. 1, 3, 5, 6, 7 and 8 are small votive stūpas of the customary type resembling those at Jauliāñ and, like them, decorated with tiers of lions and Atlantes, or of Corinthian pilasters alternating with niches in which figures of the Buddha and attendants are usually portrayed. All, however, are now in a sorry state of dilapidation.

Against the wall on the south side of the Stūpa Court was a row of chambers, one of which served as an entrance portico to the monastery, and the others as image chapels. In the space between them, patches of lime plaster painted red were found still adhering to the wall of the court at the point marked R in the plan, and a few heads and other fragments of stucco figures were unearthed in the corner at the point S.

The first Court of Cells, D, is a small one, comprising a vestibule and 8 cells ranged on the north, west and east sides. This accommodation, however, was augmented by the addition of two other courts, E and F, further to the south, with nine or more extra cells; so that, allowing for a double storey in each group, some forty monks in all could have been housed there. In court D, the central depression—the only part open to the sky—was exceptionally small, measuring no more than 16 by 12 feet. At its S. E. corner is the usual drain for carrying off the roof water. On the west side of this court the cells are still standing to a height of nine feet. They are provided with small

windows set high in the back wall, the sills of which slope downwards to the inside, and with the customary corbelled wall niches. Communicating between courts D and E is a passage, nearly 9 feet in width, from which a flight of steps ascends to the first floor and which also gives access to two large rooms. One of these rooms was probably the Hall of Assembly; the purpose of the other is uncertain. As shown by the character of its masonry, this monastery dates back to late Parthian or early Kushān times, when the monks were accustomed to beg and eat their food in the streets of the city, and when no kitchen accommodation was, therefore, provided. In the case of Jauliāñ and other monasteries, which also go back to the same period, kitchens and sculleries were added at a later date, and it is probable that similar additions were made here at Giri. If so, they may be situated in the as yet unexcavated area to the west of court E or F.

Besides the stucco reliefs referred to above from the Stūpa Court, the minor antiquities recovered from this monastery included spear and arrow heads, fishplates, rings, spoons and hammers of iron, a miniature casket, antimony rods of copper, pipal leaves and rosettes of the same metal, bangles of shell, copper and glass, stone beads and a small gold ornament set with 4 carbuncles. Among them also was a particularly fine relief of grey Gandhāra stone depicting the Buddha seated in the Indraśāla cave with attendant figures on either side and animals in front. From above,

four *devas* shower down flowers on the Buddha's head. The composition, pose and modelling of the *devas* are exceptionally happy, and rank this relief among the best of the Gandhāra sculptures found at Taxila.

The coins recovered from this monastery numbered 309, but most of them were much worn and many were wholly illegible. Besides Local Taxilan, they included coins of Azes, Azes and Aśpavarma, Hermæus and Kadphises, Soter Megas, Kanishka, Huvishka, Vāsudeva, Shāpur III and Hormuzd II. A fact that they bring out very clearly is that, at the time of the destruction of the monastery, an extraordinary variety of coins issued several centuries before must have been still current in this part of India.

CHAPTER VI

Stūpa of Kunāla

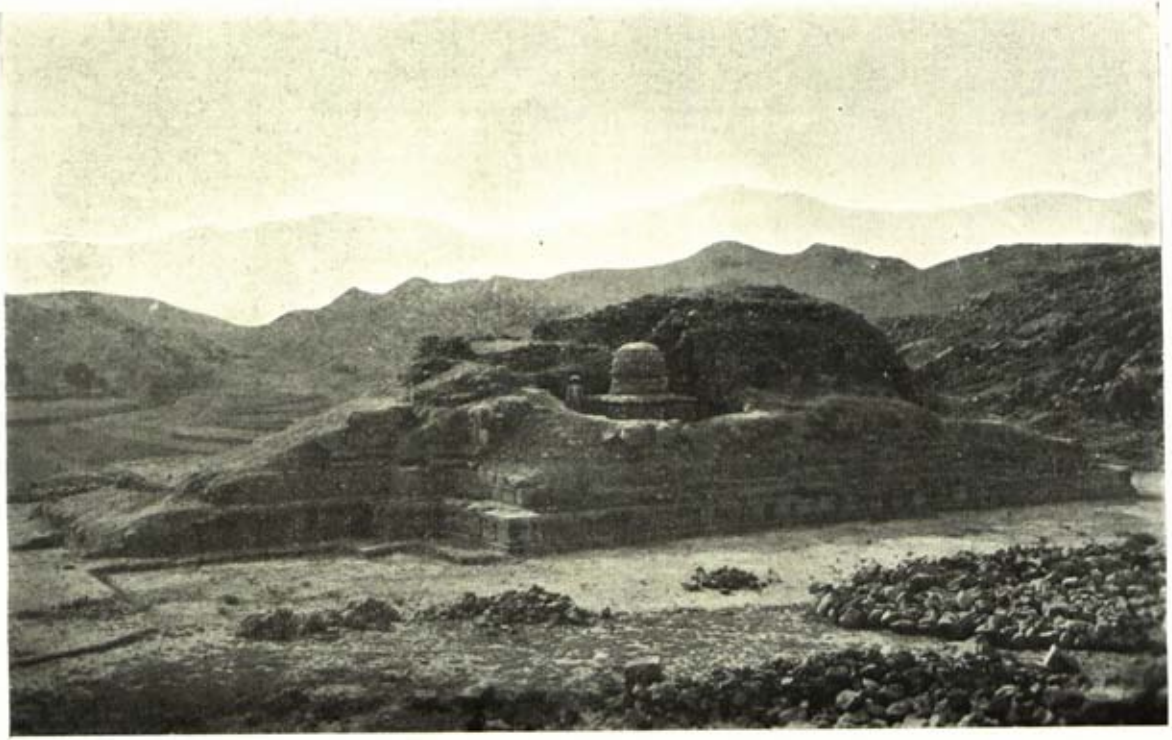
Identification of the Stūpa.

At the time when Hsüan Tsang visited Taxila, the city of Sirkap had been deserted for more than five centuries and its ramparts and buildings must long have been in ruins. The city in which the pilgrim himself sojourned, is the city now known as Sirsukh, where numerous structures of the early mediæval period are still traceable. In the neighbourhood of this city there were four famous Buddhist monuments which the pilgrim described. One of these was the tank of Elāpatra, the Dragon King; another was a stūpa which marked the spot where, according to the Buddha's prediction, one of the four Great Treasures will be revealed when Maitreya appears as Buddha[1]; a third was the stūpa of the "sacrificed head," said to have been built by Aśoka and situated at a distance of 12 or 13 *li* to the north of the capital; the fourth was a stūpa also said to have been built by Aśoka to commemorate the spot where his son Kunāla had had

[1] The four Great Treasures referred to are those of Elāpatra in Gandhāra, Pāṇḍuka in Mithilā, Pingala in Kalinga and Saṅka in the Kāśī (Benares) country. *Cf.* T. Watters, *On Yuan Chwang*, p. 243.

his eyes put out. The first and second of these monuments were rightly identified many years ago by General Cunningham: the one with the sacred tank now known as the Pañjā Sāhib at Hasan Abdāl, the other with a ruined stūpa which crowns the ridge above Baotī Piṇḍ. As to the other two, Cunningham laboured under the false idea that the city which Hsüan Tsang visited was the city on the Bhir mound instead of in Sirsukh, and he could not, therefore, but fail to identify the location of the two stūpas. Now that we know that the earliest city of Taxila was on the Bhir mound and the latest in Sirsukh, it is clear that the stūpa of the "sacrificed head" is none other than the Bhallar Stūpa, which occupies a commanding position on the extreme western spur of the Sarda hill, and it is probable that the memorial of Kunāla's misfortune is the stūpa which occupies a hardly inferior position on the northern slopes of Hathiāl, commanding a splendid view of the lower city of Sirkap and of the whole of the Haro valley (Pl. X). Hsüan Tsang describes this stūpa as being above 100 feet high, and situated to the south-east of the city of Takshaśilā on the north side of the south hill. The blind, he says, came here to pray, and many had their prayers answered by the restoration of their sight.[1] He then proceeds to narrate the story of Kunāla: of how his step-mother Tishyarakshitā fell in love with him and induced Aśoka to send him as Viceroy to Tak-

[1] *Cf.* T. Watters, *On Yuan Chwang*, Vol. I, pp. 245 sq.



VIEW OF THE KUNĀLA STŪPA FROM N.-W.

PLATE X.

shaśilā; of how she then wrote a despatch in her husband's name and sealed it with the seal of his teeth while he slept, bringing accusations against Kunāla and ordering his eyes to be put out; of how the ministers shrank from executing the order, but the prince himself insisted on obedience to his father; of how he then wandered forth with his wife and begged his way to the far-off capital of his father; of how his father recognised him by his voice and the strains of his lute; and of how the cruel and vindictive queen was put to death and the prince's eye-sight restored at Bodh-Gayā through the help of the Buddhist Arhat Ghosha.[1]

The southern hill referred to by Hsüan Tsang can only be the hill of Hathiāl which bounds the

[1] In its essence the story of Kunāla and Tishyarakshitā is the same as that of Hippolytus and Phaedra, and it is not unlikely that it was derived from the classical Greek legend. Such legends must have been familiar enough among the Eurasian Greeks in the north-west of India. Witness, for example, the drama of Antigone portrayed on a vase found at Peshāwar. Some versions of the story represent Aśoka as sending his son to restore order in Takshaśilā on the advice of a Minister of State, not through the instrumentality of Tishyarakshitā, and in some versions the prince dies after his return home without any miracle transpiring to restore his eye-sight. His real name was Dharmavivardhana and his father called him Kunāla because his eyes were small and beautiful, like those of the Himavat bird of that name. The blinding of the prince was the outcome of evil *karma* wrought in a previous existence. According to one story, he had blinded 500 deer; according to another, an arhat; or, according to the Avadānakalpalatā, he had taken the eyes (relics) out of a *chaitya*. Ghosha, the name of the arhat who restored his eye-sight to Kunāla, was also the name of a famous oculist of this district. *Cf.* T. Watters, *loc. cit.*

Haro valley on the south; and the most conspicuous stūpa on its northern side is the one on the northernmost ridge erected almost directly over the remains of the old wall of Sirkap, though, if the direction indicated in Hsüan Tsang's text is correct, we ought to look for the stūpa of Kunāla in the region of Mohṛā Moṛādu rather than of Sirkap. In proposing to identify it with the great stūpa built above the eastern fortifications of the latter city, I have taken into consideration the imposing dimensions and very striking situation of this monument, coupled with the fact that the directions found in Hsüan Tsang with reference to the points of the compass have so often proved to be faulty. The stūpa referred to rests on a lofty rectangular base which measures 63 feet 9 in. from east to west by 105 ft. 1 in. from north to south, and was provided with a stepped approach at its northern end. The base rises in three terraces, the lowermost of which is relieved by a series of stunted Corinthian pilasters resting on an elaborate "torus and scotia" moulding and formerly surmounted by a dentil cornice and copings, with Hindu brackets of the "notched" variety intervening between the capitals and the cornice. The middle terrace is plain, but covered with a coating of plaster. The uppermost terrace was decorated in much the same way as the lowest one, but was nearly three times as high; and the base mouldings and entablature were proportionately more massive and elaborate.

DESCRIPTION.

Of the superstructure of this monument only a fragment of the core has survived *in situ*, but the form and construction of the terraced base, coupled with the style of the decorative details, leave no room for doubt that the stūpa, as it stands, is of the same age as the great Bhallaṛ Stūpa on the opposite side of the valley; and to judge by the character of the many architectural members belonging to the upper part of the structure which were lying in considerable numbers round its base, it seems fairly safe to conclude that the elevation of the drum and dome resembled that of the Bhallaṛ Stūpa; in other words, that the drum was circular and strikingly lofty in proportion to the size of the monument, and that it was divided into six or seven tiers, slightly receding one above the other, which were adorned with rows of pilasters, friezes and dentil cornices in much the same fashion as the terraces of the base. As in the Bhallaṛ Stūpa, too, as well as in other stūpas of this date, the relic chamber was no doubt placed near the top of the edifice; for no trace of any chamber was found in or below the plinth of the building.

A remarkable feature of this monument is the delicate concave curvature of the plinth. The western side of the stūpa, for example, measured in a straight line from end to end, is 74 ft. 10 in. long; but the line thus drawn does not coincide with the actual line of the plinth, which recedes gradually inwards towards the centre, the greatest distance between the arc and the chord being three inches. It is well known, of course, that entasis

of the columns and curvature of other lines, horizontal as well as perpendicular, was systematically employed in Greek architecture in order to correct the apparent defects caused by optical illusions; and it may be that this idea was introduced from Western Asia, along with the many other Hellenistic features which characterise the architecture of Taxila and the North-West. But, if this was so, it would appear that the optical principles which underlay the idea could not have been properly understood by the builders of this stūpa; for in this case the concave curvature has the effect of exaggerating the illusion, instead of correcting it.

This stūpa, which I assign to the third or fourth century A.D., was not the earliest monument to be erected on this interesting site. Buried in the core of the structure and towards its north-west corner, was found another and very much smaller stūpa, which appears from its style to have been erected in the time of the Scytho-Parthians, when the city wall alongside of it on the east was still standing intact. This older edifice is perched on a small rocky eminence and is standing to a height of 9 ft. 8 in. It is constructed of rough blocks of limestone and consists of a square plinth with drum and dome above, the only feature that has disappeared being the crowning umbrella. Originally the rough masonry was covered with lime plaster on which the mouldings and other decorative details were worked, but all the plaster has now fallen from the sides.

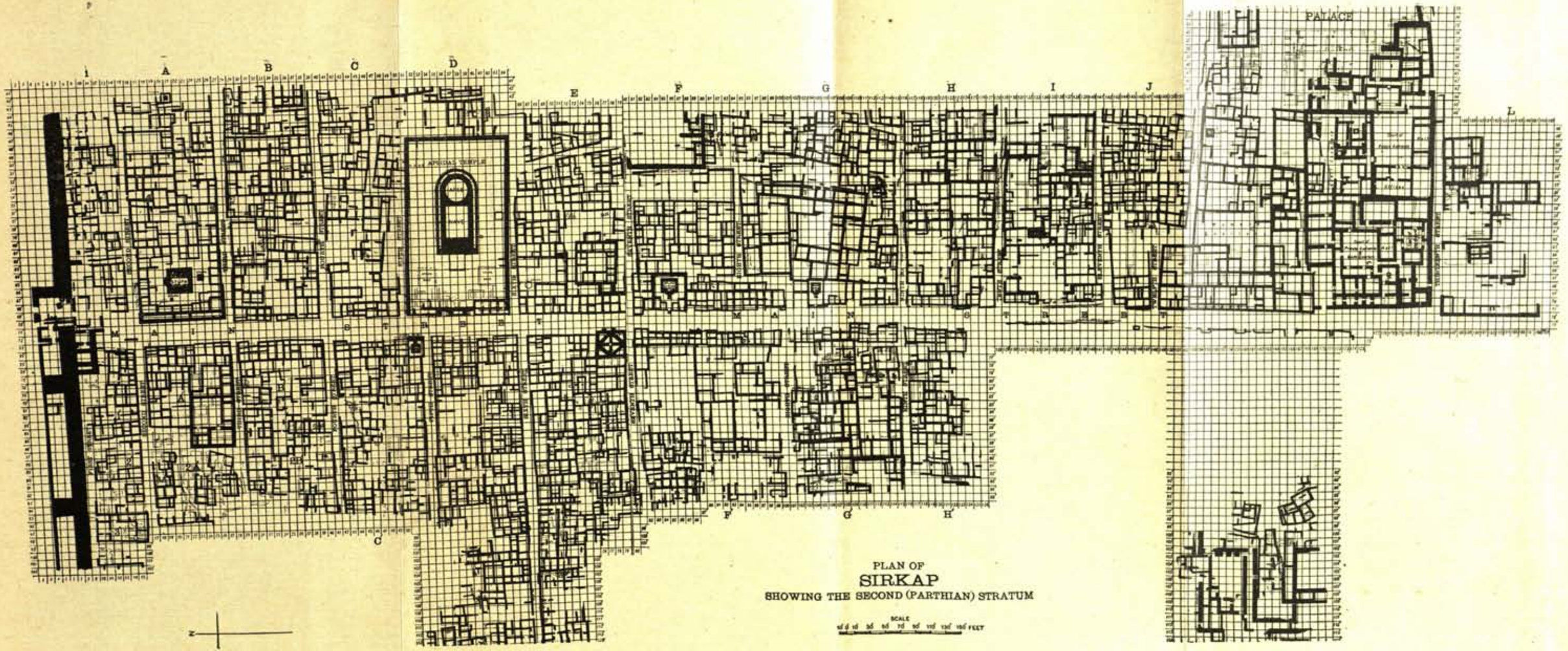
Immediately to the west of the Kunāla Stūpa and at a slightly higher level, is a spacious and very solidly built monastery in the semi-ashlar style, which is manifestly contemporary with the later stūpa. Its walls are standing in places to a height of between 13 and 14 feet, and it consists of a large court to the north and a hall to the south, the total length of the exterior wall opposite the stūpa being, as it now stands, about 192 feet, and the width of the court about 155 feet. The court is of the usual form (*chatuḥśāla*), with an open rectangle in the centre surrounded by a raised verandah and cells. In the cells are the customary arched niches for the reception of lamps etc. On the western side of this court the foundations have slipped down the hillside and many of the cells have been destroyed. The same fate, too, has befallen the southern side of the hall, evidently an "Assembly Hall", and this must have happened in ancient days, since the original massive walls on the south and west of it were replaced by thinner walls of rubble, not on the same alignment but further to the north and east, the area of the hall being thus substantially reduced. If this monastery ever possessed a refectory and kitchen, they must have been situated to the west of the Hall of Assembly. MONASTERY.

CHAPTER VII

Sirkap

Fortifications.

As stated above (p. 4), the city of Taxila was transferred from the Bhir Mound to Sirkap in the early years of the 2nd century B.C., soon after the conquest of the Panjāb by the Bactrian Greeks, and this site remained in occupation during the successive domination of Greek, Śaka, Pahlava and Kushān kings down to the time of V'īma Kadphises (end of 1st century A.D.). During the Greek period the city's fortifications were of earth only and embraced a larger area than the later walls of stone. A section of these earlier fortifications may be seen a little to the S.-W. of the Jaṇḍiāl Temple, where the low-lying ground of Babar-Khāna is bounded by the Tamrā Nāla. The later wall of stone was the work of one of the early Śaka kings—probably Azes I (circ. 50 B.C.), who appears to have found the perimeter of the Greek city inconveniently large and to have contracted it by dismantling a line of buildings inside the city and carrying his new wall over their foundations, some of which may still be seen on the west side of the North Gate. Like other structures of the period, this new wall is constructed of rubble



PLAN OF
SIRKAP
SHOWING THE SECOND (PARTHIAN) STRATUM

SCALE

masonry throughout and varies in thickness from 15 ft. to 21 ft. 6 in. It is strengthened at intervals on the outside by solid rectangular bastions, with a low berm between, intended especially to protect its foundations. The height of the walls and bastions was probably between 20 and 30 feet, and it may be assumed that the bastions were built in two storeys, of which the upper was doubtless hollow and loopholed. The walls between the bastions would also be loopholed above and provided with a terrace on the inner side for the use of the defenders.

Against the inner face of the wall, to the west of the North Gate, are some substantially built rooms evidently intended for the guard, and on the opposite side of the High Street are the remains of one of the ramps by which the defenders could mount on to the wall. The gradient at the gateway must always have been a steep one, and as the level of the ground inside the city rose, it became steeper and steeper, necessitating the construction of a deep drain to carry off the rush of water.

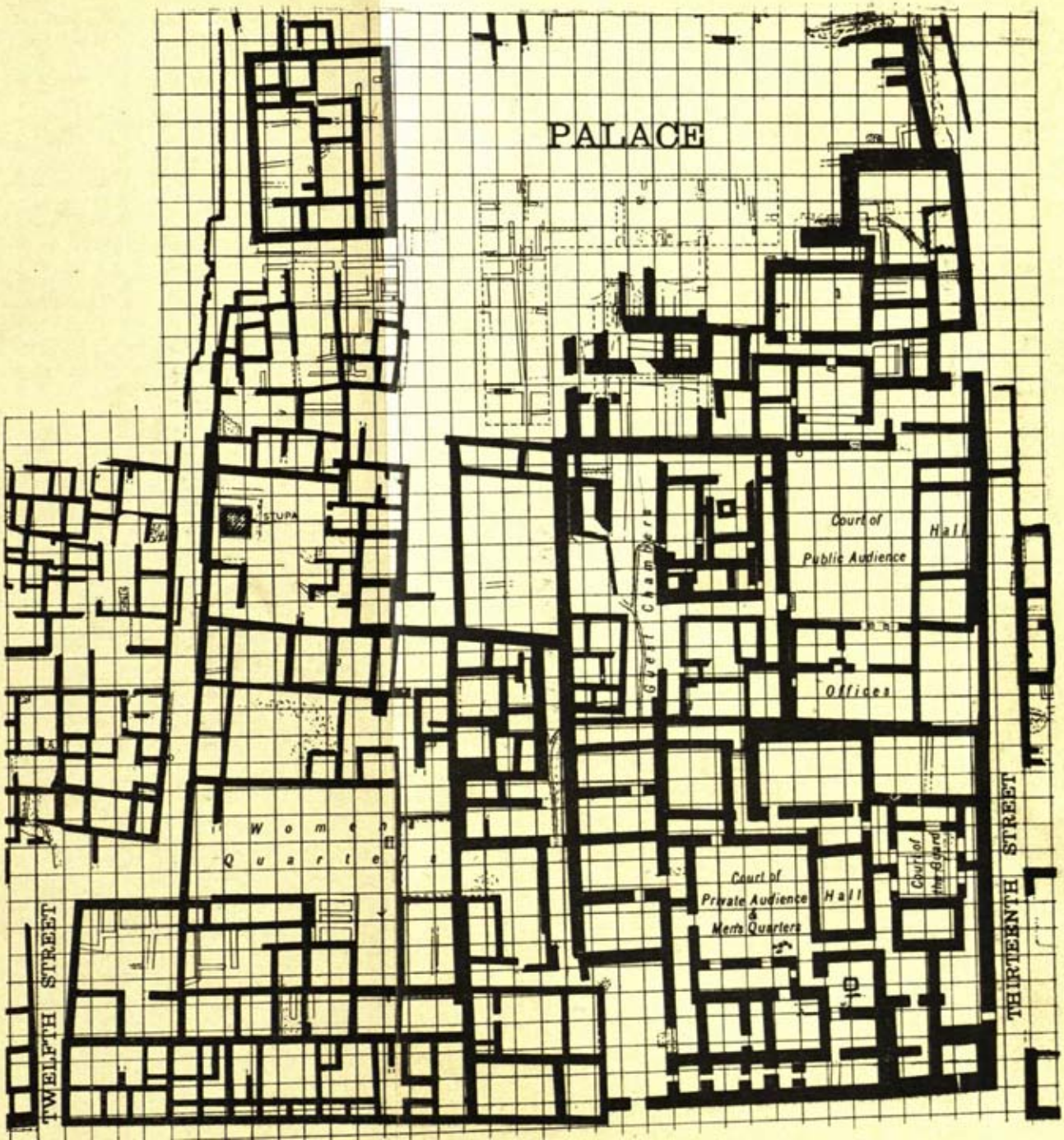
SUCCESSIVE SETTLEMENTS.

Of the remains unearthed within the walls, the majority belong to the two latest settlements and date from Parthian and Early Kushān times (1st century A.D.). Below them are the remains of earlier settlements (see pp. 101-2 below), of which the third and fourth, counting from the top, appertain to the period of the Scytho-Parthians, and the fifth and sixth to the period of the Greeks. As may be seen from the plan on Pl. XI, the excavations extend in a broad strip from the northern wall right

through the heart of the lower city, comprising a long section of the High Street and a large number of buildings on either side of it, together with the regularly aligned side-streets between them.[1] Among the buildings is a spacious Apsidal Temple of the Buddhists and several small shrines appertaining probably to the Jaina faith; but the majority are dwelling houses or shops, while one, distinguished from its fellows by its size and the relative massiveness of its construction, is evidently a palace. This last-mentioned edifice occupied a central position on the east side of the High Street, near the point where it met another important street running west to east from the Water-Gate. On its western side, which overlooked the High Street, the palace had a frontage of more than 350 feet, and from west to east a depth of over 400 feet. The oldest parts of the building are constructed of rough rubble masonry, and date probably from the early part of the 1st century A.D., but there are numerous later repairs and additions, particularly in the Women's quarters on the north, which are referable to the second half of the same century. In rooms and courts of special importance, as, for example, in the Private Hall of Audience, the rubble is faced with kanjūr stone, and there were columns of grey sandstone like those still to be seen in the Jaṇḍiāl

PALACE.

[1] It will be noticed that both streets and houses rise higher and higher as they recede from the High Street. The reason of this is that the High Street was kept clear of débris, while the débris on either side of it was steadily accumulating.


PALACE
STUPA
Court of
Public Audience
Hall
Offices
Women
Quarters
Court of
Private Audience
&
Mens Quarters
Hall
Court of
Guard
TWELFTH STREET
THIRTEENTH STREET

temple. In many of the chambers, chases sunk in the face of the walls mark the places where wooden beams, to which panelling could be affixed, were originally let into the masonry. In other chambers, the surface of the walls was covered with lime or mud plaster and finished off with a colour-wash.

Only three entrances to the palace now exist, *viz.*, one from the High Street on the west and two from Thirteenth Street on the south, but it is not unlikely that there was another entrance on the eastern side, where several walls have been destroyed. All the entrances are small. The one from the High Street led across an open court and down a corridor into what was probably the court of Private Audience, with a raised hall on its south side, which served the same purpose as the Dīwān-i-Khāṣṣ in Mughal palaces. The chambers about this court were the best in the palace and were no doubt occupied by the king himself. The second entrance, which is about ten yards up Thirteenth Street, led along a corridor to the " Court of the Guard ", and this presumably was the entrance ordinarily used by visitors to the private part of the palace, who would naturally have to pass the guard before being admitted to the royal apartments. The third entrance, which would be used by less favoured visitors, was higher up the same street and gave access to the Court of Public Audience (Dīwān-i-Āmm), where darbars would be held and the ordinary business of state transacted, the rooms about the open court serving as offices.

On the north side of the Public Court and communicating with it by a single doorway, were several small, self-contained groups of rooms, the location and plan of which suggest that they were intended for state-guests. Beyond these, again, to the north were the inner precincts of the palace reserved for the women folk and separated from the rest of the palace by noticeably substantial walls; while to the east of the zenāna was a complex of small and indifferently built quarters, presumably for the palace attendants and menials.

A feature of interest in this part of the palace—between the women's and menials' quarters—is a small court with a square stūpa base on its north side, which was evidently some sort of private chapel. Ranged alongside the stūpa were found four small votive tanks of terracotta, which may be seen in the museum. Each tank is provided with a descending flight of steps, and inside each are aquatic animals, while birds perch on their edges and the corners are surmounted by miniature lamps—the whole thus symbolising the four elements: earth, air, fire, and water. In what precise way these tanks entered into the religious observances of the period, is not known. Votive tanks of a somewhat similar kind, under the name of *Yama-pukur*, are still dedicated by maidens in Bengal to Yama, the God of Death, and there can be little doubt that their use in India has been perpetuated from a very early age. What is very remarkable, is that similar tanks were in use in the Aegean islands as far back as the 7th century B.C.

and in Egypt as far back as the Third Dynasty, some 3000 years earlier!

Although this palace is considerably larger and built more substantially than the private houses, there is nothing at all pretentious in its planning or sumptuous in its adornment. This is a feature which was commented on by Philostratus, the biographer of Apollonius, who says, when speaking of the palace, that they saw no magnificent architecture there, and that the men's chambers and the porticoes and the whole of the vestibule were very chaste in style.[1] These remarks of Philostratus are valuable as affording another proof of the substantial correctness of his account of Taxila, which, as we shall presently see,[2] finds general corroboration in the character of the private houses.

In spite, however, of the palace being so bare and unadorned, its remains are highly interesting, if only by reason of the plan they disclose—the first plan of a building of this kind which has yet been recovered in India; and this interest is still further increased, when we realise that the plan bears a striking resemblance to those of the Assyrian palaces of Mesopotamia. This will best be understood by comparing it with the palace, for example, of Sargon at Khorsabad,[3] though the latter, of course, is on an altogether vaster scale. In the Palace of

[1] Philostratus, *op. cit.* Bk. II, Ch. XXV.

[2] Pp. 92-3.

[3] Perrot and Chipiez, *Histoire de l'Art antique*, Tome II, Pl. V.

Sargon* there is the same great court surrounded by chambers, and, on the one side of it, the same court for retainers; on the other, the apartments of the zenana. Here, also, the other half of the palace is occupied, just as it is at Taxila, by reception and public rooms. The Zikurrat tower, which in the palace of Sargon was placed at the side of the zenana, is a feature which appertains peculiarly to the Assyrian religion. In the Taxila Palace, its place is taken by the modest little stūpa court referred to above.

That a palace at Taxila of the Śaka or Pahlava period should have been planned substantially on the same lines as an Assyrian palace of Mesopotamia need occasion no surprise, when we remember the vitality and persistency of the influence which Assyria exerted upon Persia, Bactria and the neighbouring countries, and remember, too, that the Parthians were direct heirs to the old established culture of all these countries. But it certainly gives an added interest to these buildings and helps us in our efforts to disentangle the archæological problems of this period.

The small antiquities found in the palace consist mainly of terracottas and potteries, various small bronze, copper and iron objects, beads, gems and coins. Among the last mentioned was a small hoard of 61 copper coins of Azes I, Azes II and Aśpavarma, Gondophares, Hermaeus and Kadphises I. One find of special interest that deserves to be mentioned here, was a number of earthenware moulds for casting coins, which were found in a

room or shop outside the palace, near its south-west corner. The coins, of which the impress is clear in many of the moulds, are those of Azes II. Probably the moulds belonged to the plant of some forger of the Pahlava epoch. Eight of them are complete and twenty broken.

PRIVATE HOUSES.

The private houses in Sirkap are constructed for the most part of the same rubble masonry that is used in the palace, but some of the more important among them have been rebuilt or repaired in the peculiar diaper masonry (pp. 45-6 above) which came into fashion under the Parthians about the middle of the 1st century A.D. Inside and outside, the walls were covered with lime or mud plaster, to which traces of colour were sometimes found adhering. Timber was used for the upper floors and roofs, as well as for verandahs, doors and smaller fittings, and in some cases, apparently, for panelling on the walls. As usual in the Orient, the roofs were flat and covered with a thick layer of mud. Whether the walls were of solid stone throughout, is open to question. In the Pippala and some other monasteries (Ch. X) most of the interior walls were solid to a height of two or three feet only, the upper part being composed of mud and boulders combined; and there are reasons for inferring that this method of construction was adopted in many of the private houses.

In the matter of their plans, the houses display less symmetry than might be expected in a city as regularly laid out as Sirkap, but they show a

decided improvement on the earlier houses at the Bhir site, and in spite of their conspicuous diversity and many irregularities, they are all based on one and the same principle. The unit of their design, that is to say, is the open court flanked or encompassed by chambers (*chatuḥśāla*), just as it is in the palace and monasteries; and this unit is repeated two, three, four or more times according to the amount of accommodation required. Some idea of the lines on which houses and shops were planned may be obtained from blocks G, F and E, on the east side of the High Street, but the remains throughout this site are in too damaged and fragmentary a state for the elevations or interior arrangements of the buildings to be reconstructed.

BLOCK G. In block G—the fourth block to which we come on the right side of the High Street after leaving the palace—the frontage on the High Street is occupied partly by shops, partly by a small stūpa-shrine with quarters alongside, intended probably for the priest in charge. The house behind is a large, solidly built edifice, which dates from about the middle of the first century A.D. and comprises four courts and more than 30 rooms on the ground floor. The minor buildings in the same block to the south and east of this house are evidently habitations of a poorer class, some of which were probably dismantled to make room for the larger house. Many of the larger houses at this period seem to have had a shrine of some sort attached to them, and in most cases this shrine opened directly on to the street, so that passers-by might enter and pay

their devotions. In this house, the shrine probably appertained to the Jaina faith.[1] It consists of a small rectangular base adorned with a series of five pilasters on each side, with a simple base moulding, and with a cornice relieved by the familiar "bead and reel" pattern. The drum, dome and umbrella of this stūpa have fallen, but parts of them were unearthed in the débris of the courtyard, along with portions of two Persepolitan columns with crowning lions[2], which used to stand, probably, on the corners of the base, and numerous members of the balustrade which ran around its edge. In the centre of the base and at a depth of about 4 feet from its top, was a small relic chamber, and within this chamber was a steatite casket containing eight copper coins of the Scytho-Parthian King Azes II (?) and a smaller casket of gold, in which were some fragments of calcined bone, small pieces of gold leaf, and carnelian and agate beads.

Close by the south side of the staircase is a small square plinth, the purpose of which is doubtful. A plinth of a similar kind occurs at the bigger stūpa at Jaṇḍiāl. Judging from their unsubstantial character, it seems hardly likely that these plinths were intended to sustain the weight of

[1] The reason for regarding these stūpa-shrines as of Jaina rather than Buddhist origin, is that they closely resemble certain Jaina stūpas depicted in reliefs from Mathurā.

[2] Imitated, no doubt, from the pillars which the Emperor Aśoka set up at many of the most famous Buddhist stūpas. *Cf.* p. 41.

a column. They may, perhaps, have served as the bases of fonts or lampstands.

SHRINE OF THE DOUBLE-HEADED EAGLE IN BLOCK F.

In the next block F, the range of shops fronting the High Street is more evident and the stūpa-shrine is more pretentious (Pl. XIII). On the front façade of the latter all the pilasters are of the Corinthian order, two having rounded and the remainder flat shafts. The interspaces between these pilasters are relieved by niches of three varieties. The two nearest the steps resemble the pedimental fronts of Greek buildings; those in the centre are surmounted by ogee arches like the familiar "Bengal" roofs; and those at the corner take the forms of early Indian *toraṇas*, of which many examples are portrayed on the sculptures of Mathurā.[1] Perched above each of the central and outer niches is a bird, apparently an eagle, and it will be observed that one of these eagles is double-headed. The presence of this motif at Taxila is interesting. It is known to occur in early Babylonian and Hittite sculptures from Western Asia; and it is found also on an early ivory of the Geometric Period from Sparta. But later on it seems to have been especially associated with the Scythians, and we may well believe that it was the Scythians who introduced it at Taxila. From the Scythians, probably, it was adopted into the Imperial Arms of Russia and Germany, and from Taxila it found its way to Vijayanagar and Ceylon,

[1] *Cf.* V. A. Smith, *Jain Stūpa and other Antiquities of Mathura*, Pl. XII.

SIRKAP: SHRINE OF THE DOUBLE-HEADED EAGLE.

PLATE XIII.

where it still appears on the banners of the Kandyan chiefs.

The whole facing of kañjūr stone, including mouldings and other decorations, was originally finished with a thin coat of fine stucco and, as time went on, numerous other coats were added, several of which, when first excavated, showed traces of red, crimson and yellow paint. Both drum and dome were probably adorned with decorations executed in stucco and painted, and the dome was surmounted by three umbrellas. At the edge of the steps and round the base of the stūpa was a low wall decorated on the outside with the usual Buddhist railing, parts of which were found in the courtyard below. A good idea of the appearance of the stūpa, when intact, may be obtained from a relief of the Mathurā School published in V. A. Smith's *Jain Stūpa and other Antiquities of Mathura*, Pl. XII, which appears to have been executed at no great length of time after the erection of this building. But in this relief the style of the stūpa is more pronouncedly Indian than the stūpa in Sirkap. In the latter, the whole basis of the decorative design is Hellenistic, the mouldings, pilasters, dentil cornice and pedimental niches being all classical, while the only Indian features are such subsidiary details as the *toraṇa*, the ogee-arched niche and the brackets above the pilasters. It remains to add that the chamber containing the relics in this stūpa was found in the centre of the base at a depth of 3 ft. 2 in. below its top, but it had long since been rifled of its contents.

ARAMAIC INSCRIPTION.

Built into one of the walls of the priest's quarters belonging to this shrine was part of an octagonal pillar of white marble with an Aramaic inscription engraved upon it. The record is fragmentary and its interpretation is doubtful, but there is enough to indicate that it was in honour of some high official.[1] The discovery of this inscription is of special interest in connexion with the origin of the Kharoshthī alphabet, since it confirms the view that Kharoshthī was derived at Taxila (which was the chief city of the Kharoshthī district) from Aramaic, the latter having been introduced into the North-West of India by the Achaemenids after their conquest of the country about 500 B.C.

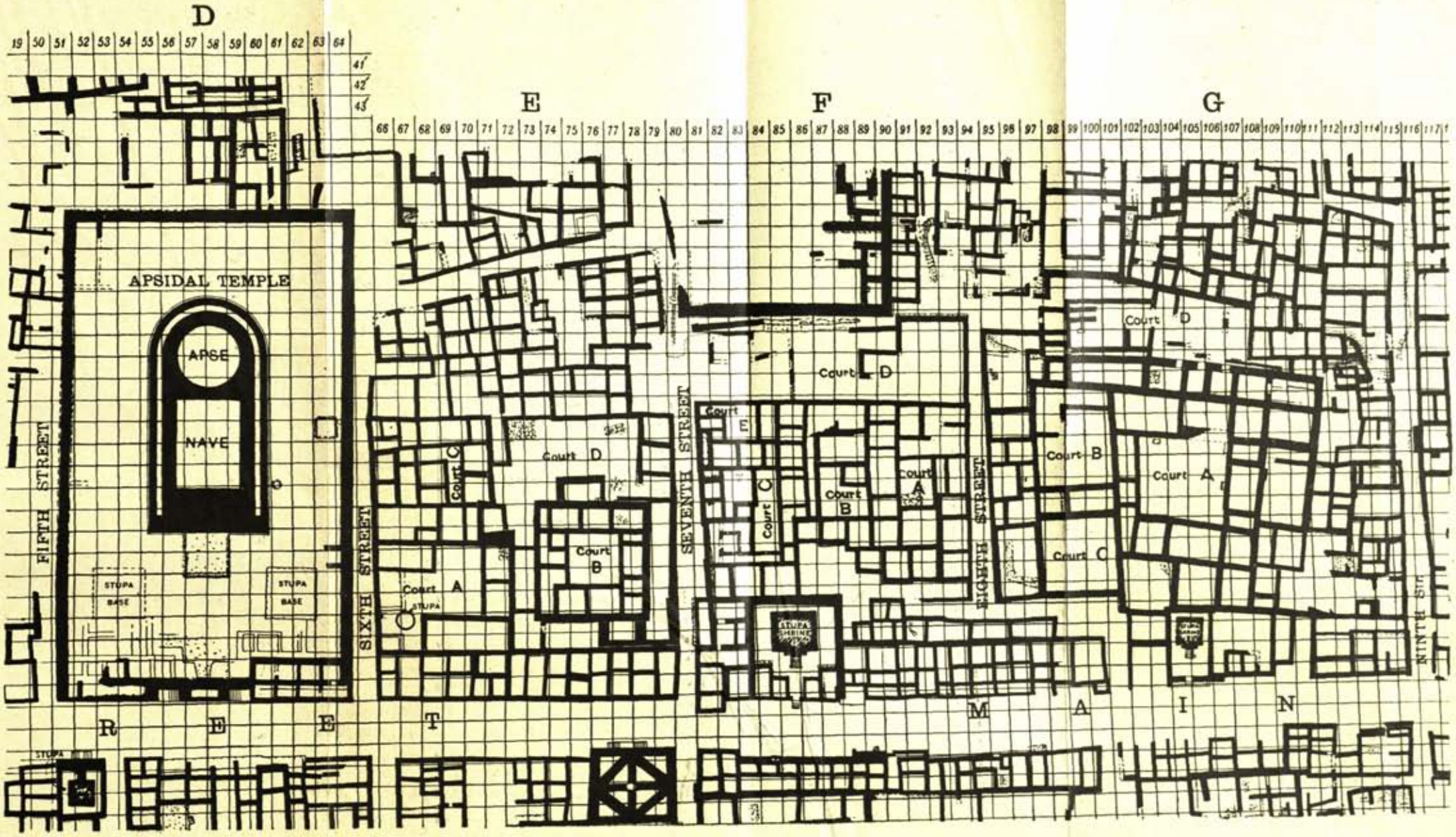
HOUSE F.

The house to which this shrine was attached lay at the back of it (Pl. XIV). It possessed more than thirty rooms on the ground floor and five open courts, namely, the three interior ones A, B and C, the large court D stretching across the eastern side, in which there may have been a little garden, and the smaller court E on the west side, which was probably the main entrance to the house. The range of seven small rooms on the west side of this court at the back of the shops, were doubtless meant for some of the household servants.

BLOCK E.

In the neighbouring block E there is no shrine opening on to the High Street, the whole frontage

[1] See H. A. Winkler in the *Nachrichten von der Gesellschaft der Wissenschaften zu Göttingen Phil.—Hist.—Klasse*, 1931, pp. 6-17.



PLAN OF BLOCKS D, E, F AND G IN SIRKAP.

being taken up by a row of small shops. In court A, however, at the north-west corner of the house was a small circular stūpa, now reconstructed, which had been thrown down bodily—evidently by an earthquake—in ancient days and was found lying on its side. This stūpa, which seems to have been intended for private worship only, is interesting for two reasons; first, because the level from which it springs shows it to be much older than the house itself; secondly, because, when first unearthed, it was decorated with a unique type of acanthus ornament boldly modelled in lime stucco and painted.[1] Besides the court A, in which this stūpa stood, there were two other courts in this house (B and C) encompassed on all sides by chambers and a fourth court (D) with only three small rooms on its southern and another on its western side. At first sight it might seem that the square court B, with rooms on every side, constituted a small but complete house in itself, and it was, indeed, taken to be such, when first excavated. As a fact, however, there can be little doubt that it was built as an integral part of the whole house, when the latter was reconstructed in Parthian times, and that the purpose of designing it as a virtually detached unit in relation to the rest of the house was to provide a clear space on all four sides of it and thus permit of the insertion of windows in the outer walls, without risk of the rooms being overlooked from the public streets. It

[1] *Cf.* A. S. R., 1912-13, p. 29 and Pl. XXVa.

was beneath the floor of Chamber 18 at the S.-W. corner of the Court B, that a particularly valuable hoard of jewellery and other *objets d'art* was found, including the head of Dionysus in silver repoussé shown in the frontispiece, and a bronze statuette of the Egyptian Child-god Harpocrates (Pl. XV). Among other objects from the same hoard were gold bangles, ear-rings, pendants, finger-rings, beads, a gold locket and a silver rat-tailed and hoof-handled spoon. Another small hoard, unearthed on the north side of the Courtyard D, contained a small gold figure in relief of the winged Aphrodite, a small medallion with a Cupid in the centre, some jacinths and garnets cut *en cabuchon*, a gold necklace and a number of coins of three hitherto unknown rulers, Sasas, Sapedana, and Satavastra.

A remarkable feature of the houses in Sirkap is that, although in some of them there are doors communicating between the inner rooms, there are seldom any doors giving access to the interior from the courts or streets outside[1], the reason apparently being that the houses were raised on high plinths, and that the chambers now visible served either as foundations—in which case the interiors were filled with rubble—or as cellars entered by means of stairways or ladders descending from the rooms above. The presence of such cellars or *tahkhānās*, as they are commonly called, at Taxila seems to be alluded

[1] In this respect the private houses differ from the palace described above.

Figure of Harpocrates.

to by Philostratus, who says that the houses are so constructed that, if you look at them from the outside, they appear to have only one storey, but, if you go into them, you find in reality that they have underground rooms, the depth of which is equal to the height of the chambers above.[1] As a matter of fact, the lower chambers are not, strictly speaking, underground, but anyone seeing only a single row of windows from the street, and having to descend from the upper rooms into the *tahkhānās* below, might well be excused for calling them underground cellars.

MINOR ANTIQUITIES OF SIRKAP.

The minor antiquities recovered from these and other houses in Sirkap are many and various. They include large collections of gold and silver ornaments; silver vessels; earthenware pots of many shapes and sizes, from lamps and drinking goblets and incense burners up to the great store-jars, three to four feet in height, in which grain, oil and the like were kept; terracotta figurines and toys; stone bowls, goblets, decorated plaques and dishes; iron vessels and utensils, among which are folding chairs, tripod stands, horses' bridles, keys, sickles, spades, swords, daggers, shield bosses and arrow-heads; bronze and copper cups, lamps, caskets, scent bottles, pens and inkpots, ornamental pins, bells, finger rings; several thousands of coins and numerous collections of gold and silver jewellery. All these objects will be found displayed in the

[1] Philostratus, *Life of Apollonius of Tyana*, Bk. II, Ch. XXIII.

museum, where the visitor can study them at his leisure. Most of the jewellery and other valuables were found beneath the floors of houses in the Parthian city, where they had probably been hidden when Taxila was sacked by the Kushāns between the year 60 and 64 A.D. Apart from those already alluded to in block E, the most important hoards were found in a room at the back of the Apsidal Temple and in block D[1].

BLOCK E'. In the block of buildings opposite to E, on the western side of the High Street, a noteworthy feature is the stūpa at the south-east corner, access to which is provided on the east side by a double flight of seven steps faced with squared kañjūr masonry. The plinth of this stūpa is composed of thick walls of stone radiating from the middle, with the interspaces between them filled with débris. A pit sunk in the centre of this core revealed a square chamber at a depth of between seven and eight feet below the surface; but, unfortunately, the chamber had been broken into and rifled in days gone by.

APSIDAL TEMPLE D. The next building on the east side of the High Street is the great Apsidal Temple of the Buddhists to which I referred on p. 59. This temple, the plan of which will be apparent from Plate XIV, faces to the west. It stands in a spacious rectangular courtyard, with two raised platforms to right and left of the entrance of the temple and rows of small chambers, presumably for the monks, against the west compound wall. The temple was built on the

ruins of earlier buildings of the Scytho-Parthian period, and with a view to providing a level court and at the same time adding to the impressiveness of the building, these earlier structures were filled in with débris and a raised terrace was thus created, access to which was provided by two flights of steps on the street front. The platforms to the right and left (C^1 and C^2), as one enters the court, are the foundations of two small stūpas, amid the fallen masonry of which were found numerous stucco heads and other decorative objects which had once served to adorn these edifices.

The value of these sculptures is all the greater, because their date can be fixed with practical certainty to about the middle of the first century A.D., and they thus furnish an important landmark for the history of art in the North-West of India under the Parthians and their successors.

In the middle of the court stands the Apsidal Temple, and just as the court is raised above the level of the street, so the temple itself is raised on a plinth well above the level of the court. It consists of a spacious nave[1] with a porch in front and a circular apse behind, the whole surrounded by an ambulatory passage (*pradakshiṇā*), to which access was gained from the front porch. The plan,

[1] Gen. Cunningham found in the nave the remains of some colossal figures of burnt clay. The apse, which had been partially excavated by Major Cracroft, he took to be a circular well, reservoir or underground room. *Cf. C.S.R.*, II, pp. 127-8; V, p. 74.

in fact, is generally similar to that of the Sudāma cave in the Barābar hills,[1] but in the latter there was no porch in front and no passage around the outside of the chambers. In the middle of the apse, which measures 29 feet in diameter, there must originally have been a stūpa, but treasure-seekers of a bygone age had utterly destroyed it.

The exceptional depth (22 ft.) of the foundations of the apse is explained partly by the excessive weight of the superstructure, partly by the fact that they had to be carried through the débris of earlier structures until virgin soil was reached.[2]

Near the old floor level is a curious horizontal break in the masonry of the walls, which is now filled with squared blocks of stone. This break marks the position where timbering, which has since decayed, was originally inserted in the stone-work.

As to the elevation of this temple, it is impossible to speak with certainty, but it may

[1] *Cf.* Fergusson, *Indian and Eastern Architecture*, Vol. I, p. 130.

[2] Cunningham states that the apse was filled with rubbish and that Major Cracroft's excavation had been carried down until it reached a solid pavement of rough stones at a depth of 18 feet. Further, he says that the walls of the apse (presumably, below ground level) still bore traces of their stucco covering. The former statement is certainly incorrect, and the latter seems to be no more reliable than the plan of the building given in Vol. V (Pl. XIX) of his *Reports*, or his statement that the *naos* was on the east side of the apse.

plausibly be surmised that the *pradakshiṇā* passage was lit by windows pierced in its outer walls, as it was in the temple at Jaṇḍiāl to be described presently, and that light into the nave and apse was admitted through the western doorway or a window above it. The roof appears to have been of wood, as indicated by the remains of timber and a large number of iron nails, bolts, clamps, etc., found in the débris. If flat, it would naturally have been covered with earth; if curvilinear, it may possibly have been covered with metal plates, since no fragments of tiles were found on the site.

It remains to add that a valuable hoard of gold and silver objects was found beneath the floor of a small room abutting on to the back wall of the temple compound. The hoard comprised many gold ear-rings, ear-pendants, bangles, medallions, a torque and a necklace; silver anklets, jugs, goblets, cups, bowls, plates and saucers.[1] It seems not unlikely that this treasure, which like other treasures found in this city was buried when Taxila was sacked by the Kushāns, belonged to the temple itself and that the names inscribed on several of the silver vessels are those of donors. One of the names referred to is that of Jihonika (Zeionises), who was then Satrap of Chukhsa, and whose date can be fixed about the middle of the 1st century A.D.

Of the buildings between the Apsidal Temple and the northern wall of the City, there is none

STŪPA COURT A.

[1] A. S. R., 1926-27, pp. 113-16.

that calls for particular notice except the large court with a square stūpa in its centre on the east side of the High Street. This court differs from those previously described both in being more spacious and in having a number of living cells around its four sides. The stūpa in the centre had been despoiled of its relics: but the relic chamber still contained, among other objects, some broken pieces of what must once have been a singularly beautiful crystal casket, the fine workmanship of which suggests that it dates from the Maurya age. From the fragments remaining it is evident that the casket when intact, would have been too large to go inside the relic chamber; and it must be inferred, therefore, that it was enshrined there in its present broken condition. The probability is that the relics deposited here were taken from some much older monument and that, the crystal casket in which they had reposed having been broken, the fragments of it were scrupulously preserved. That contact with the relics would invest such fragments with a special sanctity is clear from the story of the Brāhman Drona, who at the division of the relics of the Buddha, received as his share the casket in which the Mallas had placed them; and it is proved also by the discovery of similar fragments in stūpas at Sāñchī, Sārnāth and elsewhere.

Exploration of lower strata.

In several blocks of buildings on the west side of the High Street, notably in A′, B′ and C′, the digging has been carried down to virgin soil and remains belonging to six successive periods of habitation have been exposed. For the most part

these different periods are represented by clearly defined foundations of rubble masonry, with layers of débris above and below them. Of these successive strata of buildings, the fifth and sixth from the top belong to the period of Greek rule at Taxila (*Cir.* 190—85 B.C.). A find of interest made in one of the houses of the fifth city was a group of objects including a bronze ceremonial water vessel, a small bronze standard lamp with 4 winged bird legs, a bronze incense burner, and the remains of a bedstead of wood covered with brass or copper sheeting. The fourth city dates from the time of the early Śaka kings, probably of Azes I, many of whose coins were found buried in small hoards beneath the house floors. It was this same Śaka king who was responsible for contracting the city's perimeter and substituting well-built walls and bastions of solid stone in place of the older fortifications of mud (p. 78), and was responsible also for the symmetrical lay-out of streets and lanes which continued to distinguish it to the end of its history. The third city from the top, which is less clearly defined than the others, is also referable to the period of the Śakas. The second city dates from Parthian times in the first half of the 1st century A.D., and is characterised by the use of diaper masonry along with the ordinary local rubble. It is to this city that most of the structures exposed in Sirkap belong.

CHAPTER VIII

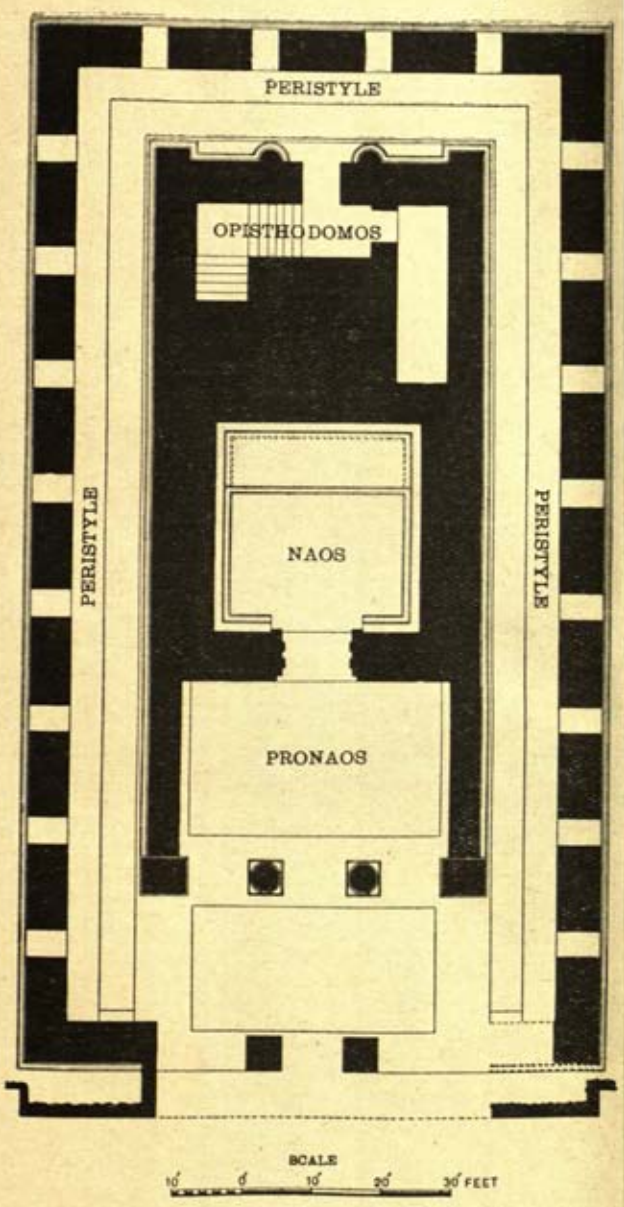
JANDIĀL

THE TEMPLE. From Sirkap we may now go north through the suburbs known as the " Kachchā koṭ " to the two mounds in Jaṇḍiāl, between which the ancient road to Hasan Abdāl and Peshāwar probably ran. The mound to the east of the road, which then rose to a height of some 45 feet above the surrounding fields, was superficially examined by Gen. Cunningham in 1863-64, and at a depth of 7 or 8 feet below the surface he discovered some walls of a large building which he surmised to be an ancient temple. Curiously enough, the General was quite correct in believing that an ancient temple lay concealed in this mound, but the walls which he himself unearthed belonged to a comparatively late structure of the mediæval epoch.[1] The ancient temple which has now been laid bare was found at a depth of 8 or 9 feet still lower down.

The position of this temple is a commanding one, standing as it does on an artificial mound some

[1] The walls in question, which were very fragmentary, had to be removed before the digging could be carried down to the lower building.

PLAN OF JANDIAL TEMPLE

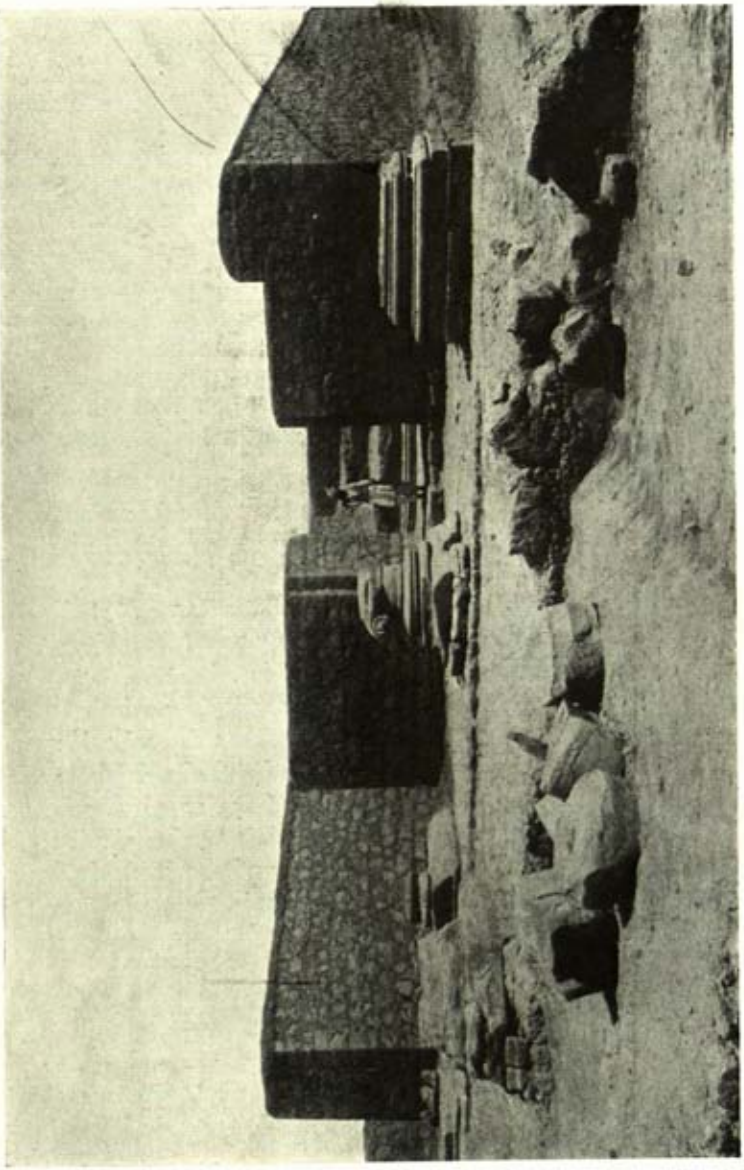


25 feet above the surrounding country and facing the north gate of the city of Sirkap. Its length, including the projection in front of the portico to the back wall, is 158 feet, and excluding the peristyle, a little over 100 feet. Its plan is unlike that of any temple yet known in India, but its resemblance to the classical temples of Greece is striking (Pl. XVI). The ordinary Greek peripteral temple is surrounded on all sides by a peristyle of columns and contains a *pronaos* or front porch, a *naos* or sanctuary, and, at the rear, an *opisthodomos* or back porch, known to the Romans as the *posticum*. In some temples, such as the Parthenon at Athens or the Temple of Artemis at Ephesus, there is an extra chamber between the sanctuary and the back porch, which in the case of the Parthenon was called the "Parthenon" or chamber of the virgin goddess Athene. In the newly excavated temple at Jaṇḍiāl the plan is almost identically the same. In place of the usual peristyle of columns is a wall pierced at frequent intervals by large windows which admitted ample light to the interior, but at the main or southern entrance of the temple are two Ionic columns[1] *in antis*, *i.e.*, between pilasters, which received the ends of the architraves passing above them. Corresponding to them on the further side of a spacious vestibule is another pair of similar columns *in antis*. Then comes, just as

[1] Ionic columns of smaller dimensions were also discovered by Gen. Cunningham in a Buddhist structure near the village of Mohrā Maliārāñ. *Cf. C. S. R.*, V, 69 and Pls. XVIII and XVIII.

in Greek temples, *the pronaos* leading through a broad doorway to the *naos*, while at the back of the temple is another chamber corresponding to the *opisthodomos*. The only essential difference in plan between this and a Greek temple is that, instead of an extra chamber between the *opisthodomos* and the sanctuary, we have at Jandiāl a solid mass of masonry, the foundations of which are carried down over 20 feet below the floor of the temple. From the depth of these foundations it may safely be concluded that this mass of masonry was intended to carry a heavy superstructure, which apparently rose in the form of a tower to a height considerably greater than that of the rest of the temple. Access to this tower was provided by flights of broad steps ascending from the *opisthodomos* at the rear of the temple and laid parallel with the sides of the edifice. Two of these flights still exist, and it may be assumed that there were at least three more flights above them, probably narrowing in width as they ascended above the roof of the main building. The altitude of this tower may be surmised to have been about 40 feet.

The masonry of the temple is mainly of limestone and kañjūr, originally faced with plaster, patches of which are still adhering to the walls at various points. The Ionic columns and pilasters, however, are composed of massive blocks of sandstone, the bases, shafts and capitals being built up in separate drums fixed together with square dowels let in the centre, as was also the practice in Greek buildings. In the construction of columns in Greek



TEMPLE OF JANDIĀL FROM S.-E.

temples it is well known that a fine joint was obtained by grinding down each drum in its bed. In the case of the Jaṇḍiāl temple the same process seems to have been followed, the beds of the drums being roughly chiselled at the centre and a raised draft left at the edge, which was afterwards ground down. The base mouldings of these columns are not very subtle in their outline, but their capitals with their "leaf and dart" and "reel and bead" mouldings are of quite a pleasing form. In several of the column and pilaster bases fractures were caused in ancient days, doubtless by an earthquake, and these fractures were repaired by cutting back the broken stones to a straight edge and dowelling on a separate piece by means of iron pins.

The wall mouldings in the *naos* or sanctum extend round the foot of all four walls, and it is obvious from their existence along the north wall that originally this wall stood free down to its base. At a subsequent date, however, a platform about 3 ft. 6 in. high, was added on this side of the chamber. The door leading from the *pronaos* to the *naos* appears to have been of wood bound with iron, of which many fragments were found in the charred débris strewn over the floor.

As to the superstructure of this temple, the architrave, freize and cornice were of wood and, no doubt, of the Ionic order, in keeping with the Ionic character of the columns, pilasters, and mouldings around the base of the walls. Of wood, too, was the roof construction; but it is unlikely that the roof

was of the ridge type usual in Greek temples. Had it been sloping, tiles[1] would probably have been used on the outside, and some of them must inevitably have been found among the fallen débris. But there was not a trace of anything on the floor of the temple, except the great charred beams of wood, long iron nails, door hinges, and a thick layer of clay mixed with masses of plaster from the walls and charcoal. It may be concluded, therefore, that the roof of the temple was flat, like the roofs of most oriental buildings, and composed of half a dozen inches of earth laid over the timbers.

To what faith this unique temple was dedicated, can only be surmised. That it was not Buddhist, seems patent from the total absence of any Buddhist images or other relics among its débris, as well as from its unusual plan, which is unlike that of any Buddhist chapel that we know of. For similar reasons, also, we must rule out the idea that it was Brahmanical or Jaina. On the other hand, the lofty tower inferred to have stood in the middle of the building, behind the sanctum, is significant. My own view is that this tower was a *zikurrat*, tapering like a pyramid, and ascended in just the same way as the *zikurrats* of Mesopotamia; and I conclude from its presence, as well as from the entire absence of images, that the temple belonged to the Zoroastrian religion. On the summit of the tower

[1] It is conceivable, of course, that copper or brass plates may have been used to cover the roof, but the thick layer of half-burnt clay found on the floor of the building is against this hypothesis.

the faithful would offer their prayers in praise of the Sun, Moon and all else which led their thoughts to Nature's God; and in the inner sanctuary would stand the sacred fire altar with the dais at the side from which the priests would feed it.[1] We know that the idea of the Assyrian *zikurrat* was familiar to the Persians, and there is nothing more likely than that the Parthians borrowed its design for their fire temples. Indeed, the *zikurrat* tower at Firuzābād has been thought by many authorities actually to be a fire altar. Moreover, it must be remembered that this temple was constructed in the Scytho-Parthian epoch, at a time when Zoroastrianism must certainly have had a strong hold at Taxila.[2]

It is possible that this is the temple described by Philostratus in his *Life of Apollonius*, in which he and his companion Damis awaited the permission of the king to enter the city. "They saw," he says, "a temple in front of the wall, about 100 feet in length and built of shell-like stone. And

[1] *Cf.* Dr. J. J. Modi in the *Times of India*, Aug. 12, 1915. I myself previously took the view that the fire altar was placed on the summit of the *zikurrat*, for we know that in Achæmenian times the Persians set their fire altars in high places and raised on lofty substructures. But Dr. Modi, the eminent Parsi scholar, doubts whether, amid the cosmopolitan surroundings of Taxila, the fire altar could thus have been exposed to view.

[2] The date here assigned to this temple is indicated by the character of its construction, and is corroborated by another shrine of similar construction at Mohṛá Maliārāñ, where Gen. Cunningham discovered a foundation deposit of 12 coins of Azes.

in it was a shrine which, considering that the temple was so large and provided with a peristyle, was disproportionately small but nevertheless worthy of admiration; for nailed to each of its walls were brazen tablets on which were portrayed the deeds of Porus and Alexander." The words " in front of the wall " correctly define the position of the Jaṇḍiāl temple, and travellers coming from the north, would naturally wait outside the north gate of the city. The description, too, of the inner sanctum as disproportionately small is significant; for this is a specially noticeable feature of the Jaṇḍiāl Temple. On the other hand, the temple is considerably more than 100 ft. in length, unless we exclude the peristyle. The words λίθου κογχυλιάτου I take to mean, not " *of porphyry* ", as they are translated by Conybeare and other editors, but " *of stone covered with stucco,*" shell having been used in India from time immemorial for the making of stucco.

Stūpas and Monastery in Mound B.

On the second of the two mounds, which lies a little to the west of the one just described, was another building, also of massive proportions and of the same age as the temple; but here the superstructure has entirely vanished and there remains nothing but a complex of foundation walls. Further north, at a distance of about 400 yards from the temple were two more low mounds, designated A and B, respectively, in the map (Pl. XXVI). In the latter, which lies to the east of the former, have been unearthed the remains of a medium-sized stūpa set in the square courtyard of

a monastery. The stūpa is of two periods, having originally been built in Scytho-Parthian times, and rebuilt in the third or fourth century of our era. The earlier structure is now standing to a height of only a little over 2 ft. above the old floor level. It is square in plan, with a projecting staircase on its southern face, and a spacious relic chamber in the centre. Round the base runs a moulding of the usual pattern, and above is a series of square pilasters, six on each side of the building, which were once surmounted by a dentil cornice. Near the foot of the steps on the eastern side is a square plinth, similar to those by the side of the shrine in block G in Sirkap.

When this stūpa and the monastic quarters connected with it had fallen to decay, another stūpa and a second series of cells were erected on a different plan above their ruins. This later stūpa has a circular plinth and is constructed of limestone blocks in the semi-ashlar style.

This later monument was partly excavated some years ago by Sir Alexander Cunningham, who appears to have penetrated as far as the later circular structure only, which he describes as being 40 feet in diameter and which he erroneously identifies with the stūpa erected by Aśoka on the spot where Buddha had made an offering of his head (pp. 140-41 *infra*). Prior to Cunningham's excavation the relic chamber had been opened by the villager Nur, who, without being aware of it, seems to have thrown out the relics concealed within; for

in the spoil earth which he had left at the side of the stūpa I found a small silver casket, lenticular in shape, containing a smaller one of the same pattern in gold, and in the latter a small fragment of bone. The larger vase in which these caskets had no doubt reposed, had disappeared.

STŪPA A, The second and smaller mound, which lies within a hundred feet of stūpa B, is also mentioned by Sir Alexander Cunningham as having been opened by the villagers and as containing a small ruined "temple." In reality it is a stūpa of almost precisely the same type as the earlier of the two just described, though the masonry and ornamental details are somewhat inferior. No relics were found in this stūpa, nor did the débris yield any minor antiquities of interest.

CHAPTER IX

Sirsukh, Lālchak and Bādalpur

Position of Sirsukh.

To reach the city of Sirsukh we must now retrace our steps by way of the Jaṇḍiāl Temple and proceed for about a mile and a half along the main road to Khānpur. Sirsukh, as already stated,[1] is the most modern of the three cities of Taxila, having been founded by the Kushāns, probably about the end of the 1st century A.D. The mounds which cover the ruins of its southern and eastern ramparts, are still clearly visible from the road alongside the little Luṇḍi nālā, but the northern and western walls have almost entirely vanished beneath the level of the fields or been destroyed, and on these two sides it is only with difficulty that their line can now be traced. Of the eastern fortifications a short section has been exposed to view near the south-east corner of the city, and it is these excavations which will be our first objective. The wall, which is constructed of rough rubble faced with

Sirsukh fortifications.

[1] P. 6 *ante*. On the analogy of *Chhatrapa-Satrapa* Cunningham (C. S. R., II, 134) identifies the modern Sirsukh with the 'Cḥhahara Chukhsa' mentioned in the Taxila plate of Pātika. But see Bühler in E. I., Vol. IV, p. 56.

neatly fitting limestone masonry of the large diaper type, is 18 ft. 6 in. in thickness, and is provided at the base, both on its inner and outer face, with a heavy roll plinth, which was added after the wall itself had been completed, in order apparently to strengthen its foundations. On the outer face of the wall, and separated from each other by intervals of about 90 feet, are semi-circular bastions, access to the interior of which is provided by a narrow passage carried through the thickness of the wall. Both the bastions and the wall itself are furnished with loopholes, which are placed immediately above the plinth referred to, at a height of rather less than five feet above the old floor level. In the bastions, these loopholes widen towards the outside and are closed on the outer face of the wall with triangular arches which give them a singularly western appearance. Beneath them, in the interior of the bastions, is a hollow horizontal chase in the wall, now filled with earth, which marks where timbers were once let into the masonry. Still lower down (on a level, that is to say, with the old floor and opposite the entrance of the bastions) there is, in some of them, an aperture which no doubt served the purpose of a drain. The floors of the bastions were composed of lime concrete containing a large admixture of river sand.

If we compare these fortifications with those of Sirkap, we shall find that they differ from the latter in several essential features. In the first place, they are faced with the large diaper masonry characteristic of the late Parthian and early

Kushān period instead of the rubble masonry characteristic of the Greek and Scythian periods. Secondly, they are pierced with loopholes for the use of defenders standing on the ground floor. Thirdly, the bastions are semi-circular in plan instead of rectangular, and are hollow within instead of solid. In the case both of Sirkap and of Sirsukh it may be assumed that the bastions were divided, like the bastions of later Indian fortresses, into two or more storeys, and that the upper storeys were hollow like the lowest storey at Sirsukh. In both cases, too, it may be taken for granted that the wall was provided with an upper terrace and with lines of loopholes corresponding with the terrace, from which the defenders could shoot down on an attacking force.

Two other striking features in which the city of Sirsukh differs from its predecessor, are its almost rectangular plan and its situation in the open valley, its builders having manifestly placed more reliance on their artificial defences than on any natural advantages which the hills might afford them. Whether these new features were the outcome of developments in military engineering in India itself, or whether they were introduced from Central Asia or elsewhere by the Kushāns, is a question which we have not yet enough data, either monumental or literary, for determining.

TOPES. In the interior of Sirsukh conditions are less favourable for digging than in Sirkap; for, on the one hand, nearly all the area enclosed within the

walls is low-lying and abundantly irrigated, with the result that the ancient remains are buried deeper beneath the alluvial soil than in Sirkap; on the other hand, the few mounds which rise here and there among the cultivated fields and which doubtless mark the sites of relatively important structures, are now occupied by graves and ziārats or modern villages, such as those of Piṇḍ Gākhṛā and Piṇḍorā, and, while any disturbance of the graves or ziārats is out of the question, the removal of the modern dwellings could only be effected at an inordinate cost. The only spot inside the city where excavation has been started is between the village of Tofkiāñ[1] and the mound of Piṇḍorā, where dressed stones and pottery had often been turned out by the plough and where there was promise of ancient structures being found relatively near the surface. Here a complex of buildings has been

[1] *Cf. C. S. R.*, Vol. II, p. 133, and Vol. V, p. 67. Cunningham describes the finding in one of the mounds near this village of the famous copper plate inscription dated in the year 78. But Cunningham himself is in doubt as to whence precisely the inscription came. In one place he says that its find-spot is situated nearly a thousand yards to the south-west of Sirsukh, while in another he speaks of its having come from the village of Thupki (Tofkiāñ) inside the city, the reason for these conflicting statements being that the copper plate in question was discovered, not by Cunningham himself, but by a *bhishti*, named Nur, who gave different accounts of it at different times, and whose versions, therefore, are altogether unreliable. The remains which I have so far excavated near the village belong to a much later date than this inscription, and it seems more likely that the inscription came from one of the stūpas near Jaṇḍiāl than from the interior of Sirsukh.

revealed which may eventually prove of considerable interest. It comprises parts of two courts, a larger one to the west and a smaller one to the east, with a series of chambers disposed around them and a connecting passage between. As to the extent and plan of this building, all that can be said at present, is that the principle on which it is designed, namely, the principle of the open court flanked by rows of chambers, is the same as that followed in the older structures of Sirkap; and, judging by the dimensions and structural character of what has been exposed, it may be surmised that the whole will prove to be a building of considerable size and importance.

It remains to add that the wall stretching across the north side of the court appears to be the foundation of a raised plinth which probably supported a pillared verandah; that the masonry of the walls is semi-ashlar above the ground level, but approximates to rubble below; and that in some of the chambers were found large earthenware jars of the type usually employed for the storage of grain, oil or water, as well as coins of Kadphises II, Kanishka and Vāsudeva and various other minor antiquities.

LĀLCHAK.

BUDDHIST REMAINS: MONASTERY.

(NOTE.—*The remains at Lālchak and Bādalpur are poorly preserved, and visitors are not recommended to spend their time on seeing them.*)

Between one and two hundred yards from the north-east corner of Sirsukh and on the pathway to

the village of Gaṛhī Sayyadān was a group of four small mounds, known locally as Lālchak. These four mounds covered the remains of a small and unimportant Buddhist settlement containing stūpas, shrines and monasteries, which appear to date from about the fourth or fifth century A.D. The best preserved among them is a little monastery in the northern part of the site. It is standing to a height of between seven and eight feet above the ground level and contains a vestibule in front, four chambers for habitation leading off from it, and a small apartment on the west side, which probably served as a store-room. The entrance is in the middle of the southern side and is approached by a flight of four stone steps. A second stairway, also of stone, led from the western end of the vestibule to the upper storey, which has now perished. No doubt the walls of the upper storey were of stone, but to judge from the large quantities of ashes, burnt earth, iron nails, clamps and the like which were found in the débris, the fittings and upper floor must have been of timber, and the roof of the same material, with the usual covering of earth. The date assigned above to this monastery, is based upon the style of its masonry; for no minor antiquities to which a definite date can be assigned, were found associated with its foundations or walls. On the other hand, in the débris a few feet below the surface of the mound there came to light four silver coins belonging to the White Huns, which suggest, though they do not prove, that the building had been burnt out and buried from view before the fifth or sixth

century of our era. Indeed, it is quite possible that it was not in occupation for more than a few decades; for, though the stairway is worn and smoothed by the passage of many feet, half a century would be quite enough time to account for this.

Among the minor antiquities recovered from this site were an ornamental *triśūla* and rosettes of copper, a bronze finger ring, iron pickaxe and arrow-head, and a necklace of carnelian, garnet, calcedony, crystal, malachite, lapis-lazuli, gold, pearl, and shell beads.

STŪPA I.

To the south-east of the monastery just described and about forty yards distant from it is a stūpa standing in the middle of a rectangular compound.[1] It is square in plan with a broad flight of steps on its northern side. The pilasters which adorn the plinth are of the Corinthian order but stunted and decadent, and surmounted, as is usual in later structures, by Hindu brackets.

Inside the court of this stūpa and to the right and left of the entrance were the remains of two small chapels, of which the one to the east comprised a square sanctum for the image with a portico in front, paved with stone slabs. What was left of the other was too fragmentary to be made out with certainty. The design no less than the construction of this and the following building indicates that they were coeval with the neighbouring monastery described above, and it is therefore of

[1] This compound as well as the two small chapels mentioned below and Stūpa II, have been covered in again.

interest to record that a pit sunk in the rubble core of this stūpa yielded 140 tokens and coins of various issues, including some of the city of Taxila, others of Antialcidas, Kadphises II, Indo-Sasanian kings and Sāmantadeva. It is very unlikely that these coins, lying haphazard in the earth, were intentionally deposited there when the stūpa was erected. Their presence may be accounted for on the assumption that the débris used for the core of the stūpa was brought from one of the ancient city sites where such coins are found in abundance.

STŪPA II. Between Stūpa I and the monastery were the remains of a second stūpa, of which nothing was left standing except its semi-ashlar foundations. Fortunately, the relic-deposit in the centre of these foundations had not been disturbed. The earthenware pot in which it reposed had been broken by the weight of the débris above, but the deposit itself was intact and proved to consist of thirty beads of gold, garnet, ruby, jasper and shell. The relic bone, which had presumably accompanied them, had crumbled to dust.

BĀDALPUR.

Of the great stūpa of Bādalpur, near the village of Bhera, there is little that need be said. In its construction, and doubtless also in its design, it resembled the Bhallaṛ and Kunāla stūpas, and must have been one of the most imposing monuments at Taxila; but it has suffered much from the spoliation wrought by treasure-seekers in the past, and apart

from its massive plinth, which measures over 80 ft. in length by 20 in. in height, there is little left of its former grandeur. On the north and south sides of the stūpa are two rows of chambers with narrow verandahs in front, which served as chapels for images; and about 70 yds. to the east are the buried remains of a spacious monastery.

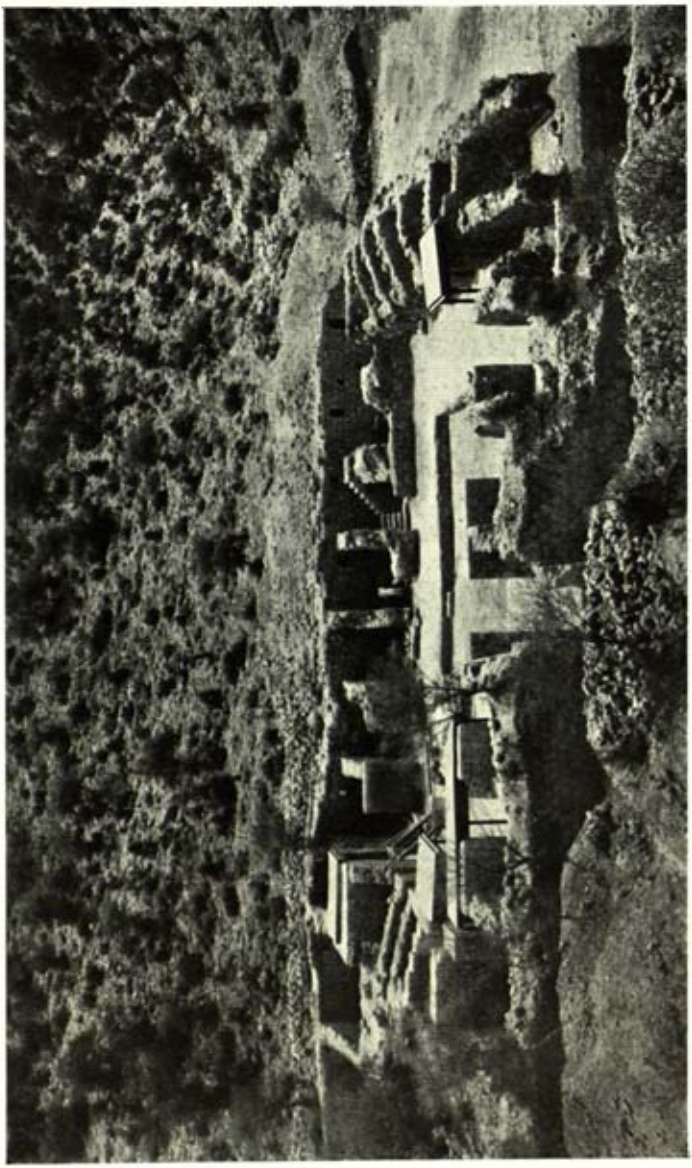
The style of the masonry coupled with the finds of coins, which belonged almost exclusively to the Kushān Kings Kanishka, Huvishka and Vāsudeva, betoken the latter half of the third century A.D. as the probable date of these structures.

CHAPTER X

Mohṛā Morādu, Pippala, Jauliāñ and Bhallaṛ

Visitors to Taxila who do not wish to make the round of all the excavations, will find it convenient to omit the remains at Tofkiāñ, Lālchak and Bādalpur, which are of secondary interest only, and to proceed direct from the fortifications of Sirsukh to the groups of Buddhist buildings at Mohṛā Morādu, Pippala and Jauliāñ, which in many respects are the best preserved and the most striking monuments of their kind in the North-West of India. The first of these groups lies about a mile to the south-east of the city of Sirsukh and is situated in a small glen at the back of the village of Mohṛā Morādu. Here, as one goes eastward, the slopes begin to be noticeably greener; for the wild olive and *sonattha* shrub grow freely among the rocks, and the rugged gorge of Meṛi, through which the pathway ascends to the monuments, is singularly picturesque. Inside the glen—or it might better perhaps be termed a cup in the hills—an oblong terrace was constructed by the Buddhist builders, and side by side on this terrace were erected a stūpa and a monastery of commanding size, the former at its western, the latter at its eastern end. When

Position of Mohṛā Morādu.



The Monastery of Moněˆ Morĕdu.

first discovered, both monastery and stūpa were buried in a deep accumulation of detritus from the surrounding hills, the only part of the structures visible to the eye being about 5 feet of the ruined dome of the stūpa, which in years gone by had been cut in twain by treasure-hunters in search of the relics, and, like the Dharmarājikā stūpa, sadly damaged in the process. Beneath this accumulation, however, both buildings proved to be remarkably well preserved, standing actually to a height of between fifteen and twenty feet and still retaining many admirably executed reliefs in stucco on their walls (Pls. XVIII & XIX).

In point of architectural design there is nothing specially remarkable about this stūpa, nothing to distinguish it from other memorials of a like character which were erected between the third and fifth centuries of our era. Thanks, however, to its protected position in the hills and other fortunate circumstances, many of the stucco reliefs with which its walls were decorated and which in other cases have almost entirely perished, are here tolerably well preserved; and, though their colouring has mostly disappeared, they suffice to give us a much better idea than we could otherwise have got, of how these monuments looked when they first emerged from the hands of their builders. Apparently, the whole surface of the structure up to the top of the drum was covered with figures; for there were groups of Buddhas and Bodhisattvas—now removed to the museum—in the bays between the pilasters (Pl. XIX), and on the face of the

STŪPA I.

pilasters themselves were series of Buddhas ranged one above the other. On the drum, again, above the berm the same figures were repeated on a smaller scale, and on each side of the steps was a continuous row of figures disposed in decreasing sizes beneath the raking cornice, just as they might have been in the pedimental groups of a classical temple. In point alike of style and technique the standard attained by the artists who modelled these reliefs is a high one. What strikes one most, perhaps, about the figures and particularly about those in the bays on the south side of the plinth, is their life and movement combined with their dignified composure. This life and movement is specially evident in some of the attendant Boddhisattvas, the swish of whose robes, with the limbs delicately contoured beneath them, is wonderfully true and convincing. Delicate, too, and singularly effective are the hovering figures which emerge from the background at the sides of the Buddhas, as if they were emerging from the clouds. Yet another point that arrests the attention, is the highly successful manner of portraying the folds of the drapery, the technical treatment of which accords with the best Hellenistic traditions and demonstrates most accurate observation on the part of the artists.[1]

[1] In Greek sculpture of the best period the mass of the material was chiselled away and the folds left, as it were, in relief; in Roman and decadent Greek work labour was saved at the expense of truth by merely grooving out the folds from the mass of the material.

MOHRĀ MORĀDU: RELIEFS ON STŪPA I.

Among the many detached heads, found round the base of this stūpa and now preserved in the local museum are several which are in an unusually good state of preservation. Over the surface is a fine slip, applied apparently before the final definition was given to the features. The face is left white, but the lips, edges of nostrils, edges and folds of eye-lids, edge of hair, folds of neck and ear-lobes are picked out in red, and the hair itself is coloured grey black.

STŪPA II.

On the south side of the steps of this stūpa is a smaller monument of the same character. It is of the same date and constructed and decorated in much the same manner as the larger edifice, but only a few fragments of the stucco reliefs have survived on the south and west sides.

MONASTERY.

The monastery connected with these stūpas is as interesting as the stūpas themselves. In addition to the usual open rectangular court it comprises also several spacious chambers on its eastern side. The entrance to the rectangular court is on the north and is approached by a broad flight of steps with a landing at the top leading into a small portico. On the west wall of the portico is an arched niche containing a remarkably well preserved group of figures in high relief, namely, Buddha in the centre and four attendant worshippers on either side.

Passing from the portico into the interior of the monastery we find ourselves in a spacious court with 27 cells ranged on its four sides. In the middle of the court is a depression about two feet deep with

steps descending into it on each of its four sides, and at its south-east corner, a square platform which once supported the walls of a chamber. This, no doubt, was a bathroom (*jantāghara*)—an indispensable adjunct of every Buddhist monastery. Round about the depression and at intervals of five feet from each other, is a series of stone slabs, the upper surface of which is level with the rest of the court. These slabs acted as bases to the pillars of a broad verandah which was constructed mainly of wood,[1] and which besides shading the fronts of the ground-floor cells served also to provide communication with the cells on the upper storey. The eaves of the verandah doubtless projected beyond the pillars which supported it, so as to discharge the rain water into the depression in the middle of the court, whence it could be carried off by a covered drain. The height of the lower storey was about twelve feet, as is proved by the ledge and row of socket holes, evidently intended for the timbers of the first floor, in the back walls of the cells on the south side. Access to the upper floor was obtained, not as might have been expected, near the entrance portico, but by way of two flights of steps in one of the cells on the south side of the building. In the lower storey, the windows are placed at a height of about eight feet from the ground, and are somewhat narrower at the top than at the bottom, contracting also considerably towards the outside. In some of the cells, but not in all, there are small

[1] The wood construction is evidenced by the mass of charcoal, iron fittings, etc., found in the débris.

niches, like those in the monastery at Lālchak and in the one adjoining the Kunāla stūpa.

The interiors of the cells occupied by the monks were covered, like the rest of the monastery, with a coating of plaster, but were probably destitute of any decoration. In the verandahs, on the other hand, the wall appears to have been relieved with colours, and the wood work was no doubt carved and painted or gilded, while the courtyard was further beautified by effigies of the Buddha of superhuman size set on pedestals in front of the cells, or by groups of sacred figures, in little niches in the walls. Of the larger effigies, remains of seven have survived round about the quadrangle, but only three of these are even tolerably well preserved. In each of these cases there is a particular interest attaching to the smaller reliefs on the front of the pedestals from the fact that they illustrate the dresses worn by lay-worshippers at the time they were set up, namely, in the fifth century A.D. Of the niches, the best preserved is the one in front of cell 4 on the left side of the monastery, the group in which depicts the Buddha seated in the *dhyāna-mudrā*, with attendant figures to the right and left.

A still more valuable discovery than these statues or reliefs, is a stūpa, almost complete in every detail, which was found inside cell No. 9 on the left side of the monastery. It is standing to a height of twelve feet and is circular in plan, its plinth being divided into five tiers, with elephants

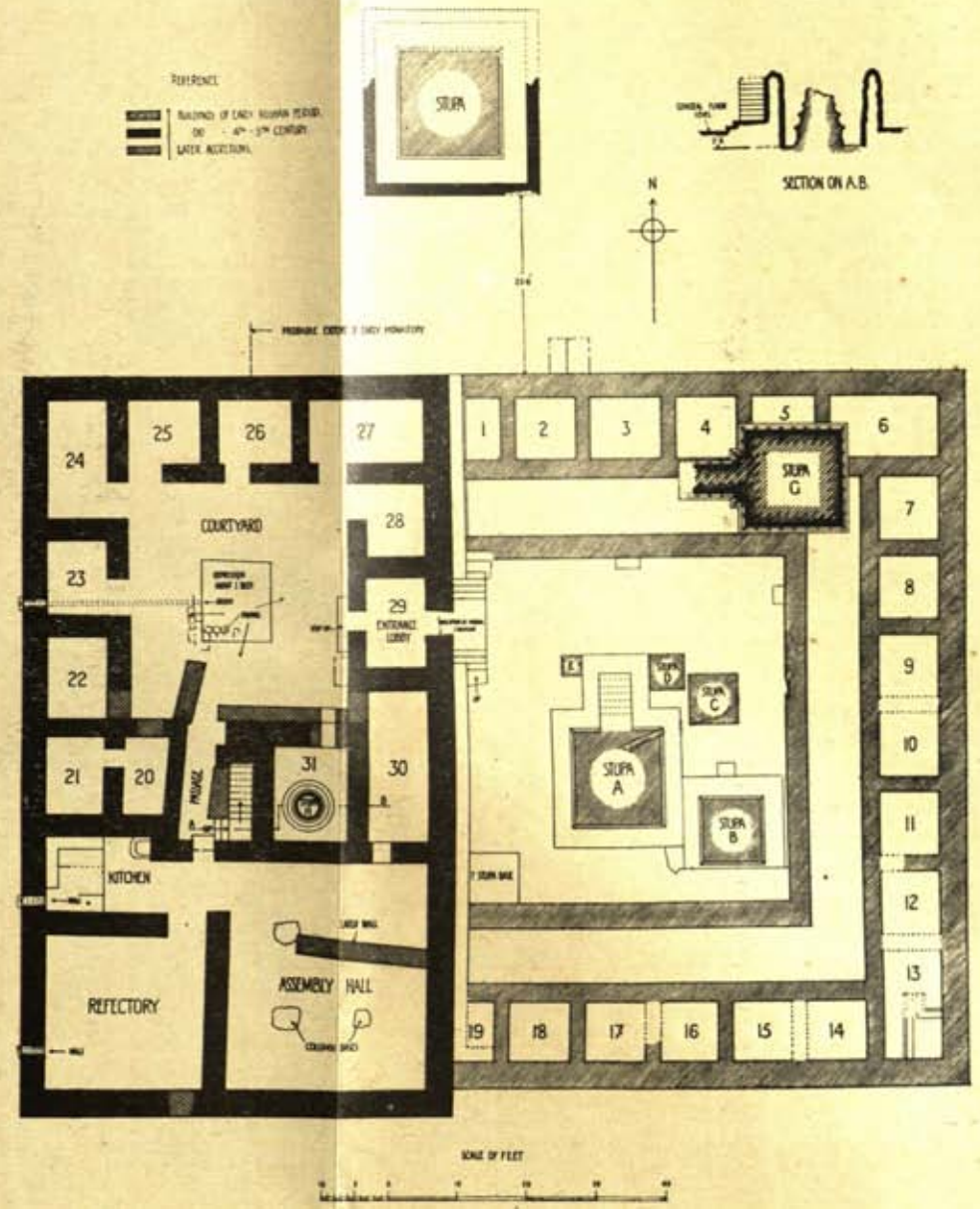
seal of the Gupta period belonging to one Hariś-chandra.

Pippala.

Though smaller and less interesting than Mohṛā Morādu or Jauliāñ, Pippala is well worth a visit. It lies at the foot of the hills between Mohṛā Morādu and Jauliāñ, about 400 yards south of the road leading to the latter place (See map). The remains are of two periods. To the east, is a court-yard of a monastery dating from late Parthian or early Kushān times and comprising an open quadrangle in the centre with ranges of cells on its four sides. In the middle of the courtyard is the basement of a square stūpa facing north, and close beside it the ruins of three other smaller stūpas. This early monastery, which is constructed of diaper masonry, must have fallen to ruin before the 5th century of our era; for at that time a second monastery was built over the western side of it, completely hiding beneath its foundations all that remained of the old cells and verandah on this side. At the same time, also, the rest of the early monastery was converted into a stūpa court by dismantling and levelling with the ground everything except the stūpas in the open quadrangle and the back wall of the cells, which was now to serve as an enclosure wall for the new courtyard. Later on, another small stūpa (G on plan) was erected near the north-east corner of this court, where it rests on the foundations of the cells of the early monastery numbered 4, 5 and 6 on the plan (Pl. XX).

EXCAVATIONS AT PIPPALA

PLAN OF MONASTERIES



The later monastery is built of heavy semi-ashlar masonry and is exceptionally well preserved. Though its scale is much smaller, its plan is generally similar to that of the monasteries at Jauliāñ and Mohṛā Morādu. It comprises a Court of Cells on the north, with a Hall of Assembly, kitchen and refectory on the south, and the converted Stūpa Court described above to the east. The Hall of Assembly, kitchen and refectory resemble the corresponding chambers at Mohṛā Morādu and Jauliāñ, but one noteworthy feature is that the dividing wall between the kitchen and dining room is constructed, not of solid stone masonry like the outer walls or the wall between the Refectory and the Assembly Hall, but of rubble stone and mud resting on a low plinth of stone. The same method of construction is also followed in the interior walls of the Court of Cells, the stone plinth being only a foot or two in height and the wall above it being composed of rubble stone loosely laid in mud and, no doubt, originally covered with mud plaster. The method of construction here exemplified is particularly interesting, as it explains why so many of the walls at Taxila have been found standing to a height of only one or two feet, and when excavated presented an almost dead level surface at the top, the fact being that they formed merely the foundation plinth for mud or mud and stone walls, which for the most part have since disappeared.

The Court of Cells was of two storeys and consisted, as usual, of an open quadrangle with cells

for the monks on its four sides and a pillared verandah, two storeys high, in front of them. In the centre of the court was a rectangular depression about a foot in depth paved with stone, which received the rain-water from the roof and from which it was carried off by a drain on the western side. Access to the upper storey (now entirely perished) was provided by a flight of stone steps which ascends at the side of the passage leading to the Kitchen and Hall of Assembly. Of the twelve chambers now standing on the ground floor, one on the eastern side served as an entrance lobby, from which a double flight of steps descended to the Court of Stūpas on the east. In another cell at the S.-E. corner (31) was found a fine example of a stūpa in almost as perfect preservation as that in the monastery at Mohṛā Morādu. This stūpa and the cell in which it stands merit particular notice, as the floor level of the cell is 2½ feet below that of the rest of the monastery, and this circumstance, as well as the character of the stūpa itself, leaves no doubt that the stūpa was built originally in one of the cells of the early (Kushān) monastery and then incorporated into the later monastery, when the latter was erected on the ruins of its predecessor. As it stands, the stūpa is about 8 feet in height and rises in three diminishing tiers, the topmost surmounted by a dome and originally covered by an umbrella, many pieces of which were found lying at its side. The lowest tier was once decorated with a series of Ionic pilasters alternating with lotus rosettes, but the Ionic pilasters were afterwards

covered by a coating of plaster and replaced by coarser pilasters of the Corinthian order. The second tier is plain save for the figure of a Dhyāni Buddha on the north side; at the base of the dome was another series of eight seated Buddhas, of which two on the south side are still partially preserved. Traces of gold, red and black paint were still visible on the monument at the time of its excavation. Originally, the stūpa cell was entered through a doorway opening from the courtyard, but this doorway was subsequently blocked up and replaced by a window at a higher level.

Outside this monastery, on the north side, is another small stūpa built of diaper masonry in the same style as the early monastery, and later on enclosed by a wall of semi-ashlar work forming an ambulatory passage around the structure. The low reliefs on the base of this stūpa are preserved to some extent on its east and south sides, and exhibit the same class of workmanship as the figures on the south side of the Mohṛā Morādu stūpa, though they are by no means in such good condition.

Among the minor antiquities found in this monastery were a number of coins including some punch-marked and issues of Sasas, Kadphises I and II, Kanishka, Vāsudeva, and a variety of Sasanian coins of Hormazd II and Shāpur II and III.

JAULIĀÑ.

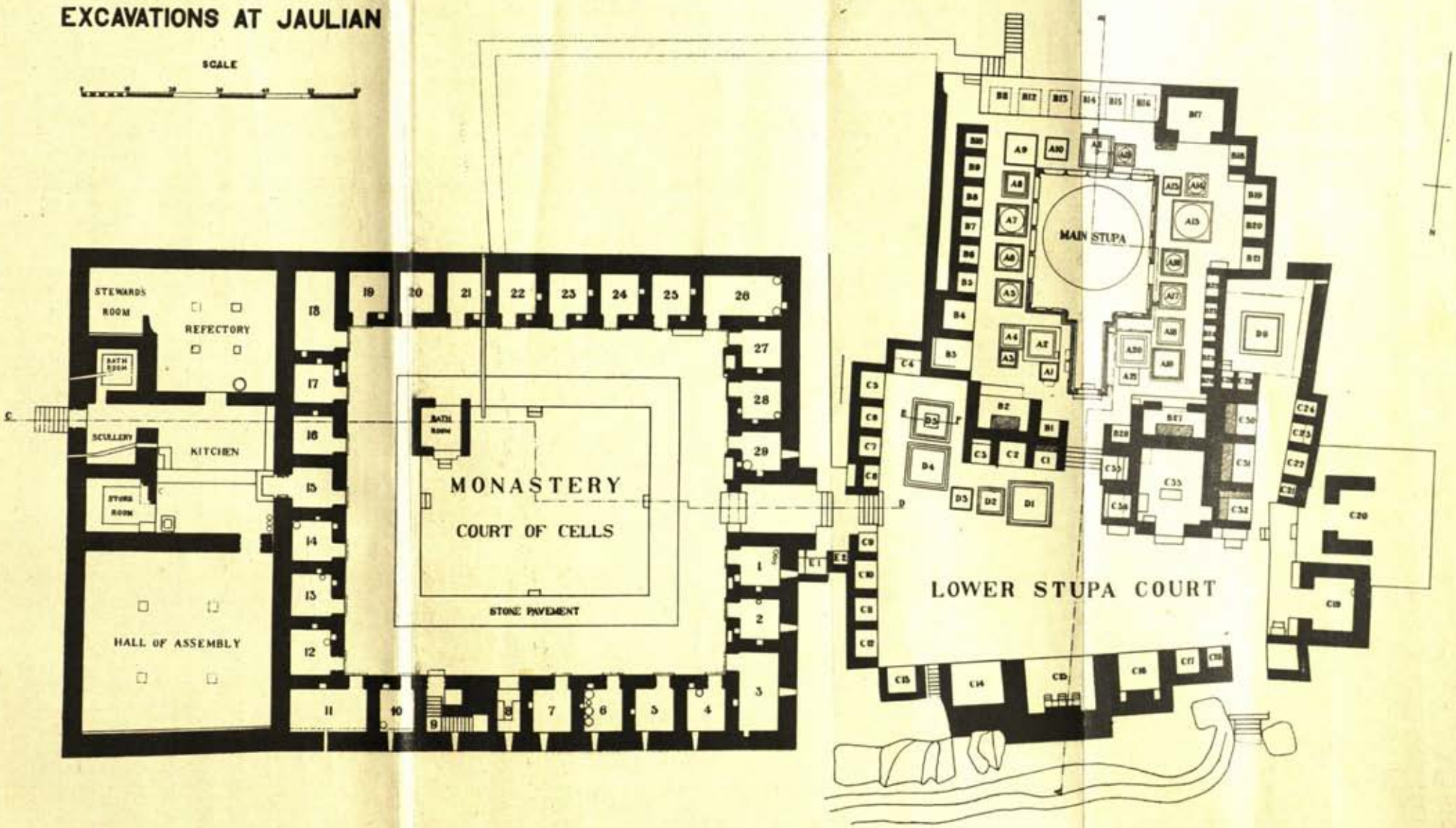
The group of Buddhist remains at Jauliāñ is perched on the top of a hill some 300 feet in height

and situated rather less than a mile north-east of Mohṛā Morādu and about half that distance from the village of Jauliāñ. To reach this hill from Mohṛā Morādu the visitor has the choice of two routes: either he may follow on foot the narrow track which leads eastward from the Mohṛā Morādu monastery, or he can return the way he came and drive by the more circuitous route along the main road. If he adopts the former plan, the walk, which is a very pleasant one, will take about 25 minutes.

The monuments in the Jauliāñ group are more highly ornamented and in a still better state of preservation than those at Mohṛā Morādu; for many of them had only just been erected and the rest but newly repaired and redecorated, when they were overtaken by the catastrophe which resulted in their burial. On the other hand, the decorations of these buildings at Jauliāñ is not of quite so high a quality as those at Mohṛā Morādu. There is less breadth in the treatment of the reliefs, less vitality and movement in the figures, less subtlety in their modelling, and less delicacy in their technique. The original foundation of these buildings is to be ascribed to the Kushān period, in the second century A.D., and their destruction to the latter part of the fifth century A.D.[1] During this period the capital of Taxila was in Sirsukh (the earlier

[1]In their construction, two main varieties of masonry are readily distinguishable, viz., large coarse diaper, which is used in the original buildings, and semi-ashlar work, which is used in later repairs and additions.

EXCAVATIONS AT JAULIAN



cities of Sirkap and the Bhīṛ Mound had then been abandoned), and we can well understand how attractive this site at Jauliāñ must have been to the members of the Buddhist *saṅgha* eager to enjoy the advantages of its dominating position on the hill-top, with its wide expanse of view, its calm seclusion, and last but not least, its cool and dustless air, but no less eager to keep closely in touch with their devotees in the great city where their daily alms would be begged. One drawback only would there be to the situation, namely, the difficulty of carrying up their water supply; but this is a difficulty which never seems to have deterred either Buddhists or Jains from establishing themselves in remote and sometimes almost inaccessible places. Doubtless, they required no great quantity of water for their needs, and possibly they could count on their devotees giving them help when they made their pilgrimages to the hill-top. There were novices, too, in the monastery, and possibly slaves as well, one of whose functions would naturally be the fetching of water. In any case, the difficulty in ancient days was not as great as now; for at the southern foot of the hill there were, until a generation ago, the ruins of several old wells, no doubt contemporary with the monastery, which have now been closed in and ploughed over by the cultivators.

The plan of the monuments at Jauliāñ will be clear from Plate XXI. They comprise a monastery of moderate dimensions, and by its side two stūpa courts on different levels—the upper to the south, the lower to the north—with a third and smaller

court adjoining them on the west. Access to this complex of buildings was provided by three entrances: one near the north-west corner of the lower court, a second at the south-east corner of the upper court, and a third on the eastern side of the monastery.

STŪPA COURTS. Entering by the first of these the visitor finds himself in a large open quadrangle with ranges of small shrines intended for cult images along its sides, and five moderate-sized stūpas, now roofed over for the sake of protection but formerly standing exposed in the open. All these stūpas have lost their domes and cylindrical drums, but their square bases are still adorned with crowds of elaborate stucco reliefs disposed in horizontal tiers, and are well worthy of attention. Observe, in particular, the Buddha or Bodhisattva images ensconced in niches with attendants at their sides, and the rows of elephants, lions or Altantes in a variety of quaint, contorted postures, supporting the superstructure above them; and observe, also, on Stūpa D^5, the Kharoshṭhī inscriptions which give the titles of the images and the names of their donors. Kharoshṭhī records of any kind are rare in India, and these are the first that have been found engraved on stucco reliefs. All the buildings in this lower court seem to have been erected at the time when the Main Stūpa was repaired and redecorated in the early mediæval period, and it will be noticed that the stonework employed in their construction is the semi-ashlar variety.

Main stūpa.

The original fabric of the Main Stūpa itself, which stands in the middle of the upper court, appears to date from Kushān times, but the masonry now visible, as well as the stucco decoration, belongs to the later repairs. On its northern face, a little to the left of the projecting steps, is a seated Buddha figure with a circular hole at the navel and an *ex-voto* inscription in Kharoshṭhī beneath, recording that it was the gift of one Budhamitra, who "delighted in the law" (*dharma*). The hole at the navel was intended for a suppliant to place his finger in when offering prayers against certain bodily ailments. Among the numerous small and richly decorated stūpas which are ranged in rows around the main structure, a special interest attaches to the one on the south side which is numbered A[11] in the plan and possesses a wonderfully well-preserved Bodhisattva figure on the eastern side of its plinth.[1] The relic-chamber in this structure was exceptionally tall and narrow, and in it was a miniature stūpa of very remarkable character. It stands 3 ft. 8 in. high and is modelled out of hard lime plaster finished with blue and crimson paint and bejewelled round the dome with gems of garnet, carnelian, lapis-lazuli, aquamarine, ruby, agate, amethyst and crystal, cut in numerous shapes and arranged in a variety of simple patterns. The workmanship of this curious relic casket is undeniably coarse and

[1] The original of this figure is now in the museum, and has been replaced by a cast on the stūpa.

barbaric, but there is a certain quaint charm in its design as well as in the bright and gaudy colouring of the inlaid gems. Down the body of the miniature stūpa runs a hollow shaft, at the bottom of which were the relics themselves, hidden within a smaller copper-gilt receptacle.

At the back of stūpa A^{11} the visitor should observe the colossal images of the Buddha which adorn the south wall of the Main Stūpa. These images are of relatively late date (5th century A.D.) and their bodies are coarsely fashioned and cumbersome, but their heads which were found lying on the floor and have been removed to the museum, are of fine stucco finished with slip and paint and modelled with both skill and feeling. Another small stūpa in the same court which also merits notice, is A^{15} on the west side of the main structure. On it are engraved several more donative inscriptions in Kharoshṭhī characters, *e.g.*, on the east face:—*Saghamitrasa Budhadevasa bhichhusa daṇamukho* "The pious gift of the bhikshu Budhadeva, friend of the holy community".

These and other votive inscriptions at Jauliāñ are specially interesting, since it is clear from their excellent state of preservation coupled with the exposed positions in which they occur that they could not have been engraved many decades before the destruction and burial of this group of monuments in the 5th century A.D.; and they thus prove that the use of the Kharoshṭhī script must have continued on at Taxila until at least the 5th century

A.D.—two or three centuries longer than has hitherto been supposed.

We shall now return to the lower court and make our way to the monastery on its eastern side. Just outside and to the left hand of the entrance is a small chapel containing a singularly beautiful group of stucco figures, the best preserved of their kind that have ever been unearthed in India (Pl. XXII).[1] In the centre is seated the Buddha in the attitude of meditation (*dhyāna-mudrā*), with a standing Buddha to his right and left and two attendant figures behind. Of the latter, the one to the left carries the fly-whisk (*chauri*), the other is the Vajrapāṇi holding the thunderbolt in his left hand. On the central image are still traces of the red and black paint and of the gold leaf with which it, and doubtless the other figures also, were once bedecked. MONASTERY.

In plan and elevation, the monastery at Jauliāñ, though slightly smaller, closely resembled the one at Mohṛā Morādu (pp. 121-125). There was the same open quadrangle with ranges of cells on its four sides; the same square depression in the middle of the quadrangle; the same small bathroom in the corner of the latter; the same Hall of Assembly; and the same kitchen, refectory, storeroom, etc., grouped on the eastern side of the Court of Cells. The disposition of these various parts of the

[1] The original figures have been removed to the museum and replaced, in the chapel, by plaster casts.

monastery is clearly shown on Pl. XXI. Here, too, we observe the same sort of alcoves for images in front of the cells, the same niches and windows inside the cells, and the same kind of stairway ascending to the upper storey.[1] But in a few particulars this monastery supplements most valuably the information obtainable on the other site. Thus, some of the doorways of the cells were still almost intact, and it is noticeable that they are lower than might have been expected. Again, on the northern side of the court, the cell immediately to the left of the stairway served as a shrine, in which remains of several burnt clay images,[2] adorned with paint and gilding, have been found. The entrance of this particular cell was relieved by bands of floral designs roughly executed, like the images inside, in burnt clay; but in both cases the burning of the clay was caused by the general conflagration in which the whole monastery was involved during the fifth century A.D. Most important, however, of all the new material furnished by the discoveries at Jauliāñ are the unique groups of figures—some of clay, others of stucco—in the

[1] A more convenient place for the stairway would have been in the immediate vicinity of the entrance, from which point the monks could have passed directly to their cells on the upper floor. Perhaps it was placed next to the chapel, so that the monks might pay their devotions there before going to their cells.

[2] One of the figures against the east wall appears to be Maitreya, holding a flask in his left hand.

JAULIĀṄ: RELIEF IN NICHE.

alcoves in front of some of the cells. These figures are as follows:—

Alcove in front of Cell 1.—Image of Buddha in (?) teaching attitude, seated on throne supported at corners by kneeling Atlantes. On each side, two attendant figures, of which the front ones are badly damaged. Of those behind, the one to the left of the Buddha is a female wearing hair ornaments and wreath; the other, to his right, is probably a male, having his hair adorned with a simple fillet and medallion. The free-flowing draperies of the central figure are worthy of notice.

In front of Cell 2, now removed to the museum.—Buddha seated in *dhyāna-mudrā* on throne. To his right, four figures, of which the front one, of larger size, may be the donor, with his wife (a much smaller figure) beside him. Behind, is a standing robed figures, of which only the lower part survives, and above it a small seated Buddha, much mutilated. To his left, in front, the figure of a monk, corresponding to the donor on the opposite side. Behind, a monk erect and in the attitude of prayer, and, above him, Indra (?) holding a fly-whisk (*chaurī*) in his right hand and wearing a jewelled head-dress, armlets, etc. The donor's figure bears traces of gilt. Much damaged by white ants.

In front of Cell 17.—In centre, seated Buddha in teaching attitude. To his right and left, in front, lower parts of two standing figures, male

to r. and female to l. Behind them, remnants of other smaller figures.

In front of Cell 29, now removed to the museum. —In centre, Buddha standing, probably in the *abhaya-mudrā*. Of subordinate figures to right and left, there appear to have been twelve, but several of them have perished. Of the surviving ones, the most striking is the male figure of medium size to the right of the Buddha, wearing tunic to knees, trousers with buttons for lacing, ornamental belt and cap. The dress and bearded head, of a peculiarly distinctive type, clearly prove him to be a foreigner (Pl. XXIII). Between this figure and the Buddha is a smaller figure with long robe and ornaments. To left of the Buddha, a standing figure probably of a monk, wearing *saṅghāṭī*. The other figures are much mutilated.

Apart from the valuable light which these and the other reliefs at Jauliāñ throw on the history of the Indo-Afghan School, they are invested with peculiar interest by reason of their technique. Clay, of course, has always been recognised as the best possible medium for modelling—far better, indeed, and more economical than lime plaster, and durable enough, so long as it is protected by a roof, but doomed rapidly to fall to pieces as soon as rain is admitted to it. It was for this reason that in the decoration of ancient monasteries and stūpas, lime-plaster was used in exposed positions, clay frequently in sheltered ones. Despite the fact, however, that clay must have been used quite as extensively as plaster, and

JAULIÑ: FIGURE OF FOREIGNER FROM GROUP IN FRONT OF CELL 29.

far more so than stone, not a single figure of clay has hitherto been found in the North-West of India, and, indeed, had it not been for the heat of the fire which overtook the buildings at Jauliāñ and which was fierce enough to convert some of these clay figures into terracotta, not a single one of them could have been preserved to us. It is this same fortunate circumstance that explains why the clay figures have perished so much more completely in the chapels of the stūpa area than inside or in the immediate vicinity of the monastery—the reason being that the chapels had but a single storey and a small expanse of roof, and consequently there was much less wood to burn than in the monastery with its double storey and broad verandahs, and, as a consequence, the heat in the chapels was not great enough to turn the clay into terracotta.

That the fire referred to above took place not earlier than the fifth century A.D., is to be inferred from various minor antiquities found in the cells, among which were a burnt carnelian seal engraved with the words *Śrī Kuleśvaradāse* in Brāhmī characters of the Gupta age, and a birch bark manuscript[1] also in Brāhmī of the same period. The latter, which is the first manuscript of the kind to be discovered in any excavation in India, is unfortunately sadly damaged by fire, but from the fragments which remain it appears to have been a Sanskrit Buddhist text, written largely in metre.

[1] Found in Cell 29.

Among the other antiquities found in the monastery were over 200 coins, mainly of debased Kushāno-Sasanian types, referable to the fourth or fifth century, many iron nails, hinges, and other implements, copper ornaments, terracottas and numerous potteries, including the several large store jars that are still to be seen in some of the cells.

Bhallaṛ Stūpa.

Another important group of Buddhist remains that has been partly excavated, is at the Bhallaṛ Stūpa, to which reference has been made on p. 72. These remains occupy a commanding position on the last spur of the Sarḍa hill, which bounds the Haro Valley on the north, and are situated at the side of the Havelian Railway, about 5 miles from Taxila Station and half a mile north of the Haro river (Pl. XXIV). The most convenient way to reach the stūpa is by means of a trolley, which can sometimes be obtained from the Taxila Railway Station. The outward journey, which is mainly down hill, takes about 40 minutes, the return journey over an hour.

According to Hsüan Tsang,[1] the Bhallaṛ Stūpa was originally built by the Emperor Aśoka to commemorate the spot where Buddha in a previous

[1] *Cf.* Beal, *Buddhist Records of the Western World*, Vol. I, p. 138.

existence[1] had made an offering of his head, but if ever Aśoka erected a monument here, no trace of it is now discoverable. The existing stūpa dates back no further than the early mediæval period. Like the Kunāla Stūpa on the opposite side of the valley, it stood on a lofty oblong base, ascended on its eastern side by a broad flight of steps. The body of the superstructure above this base, consisted, as usual, of a drum and dome surmounted by one or more umbrellas. The drum, which is strikingly high in proportion to the diameter of the monument, was divided into six or seven tiers, diminishing in size from the bottom upwards and decorated with rows of decadent Corinthian pilasters, friezes and dentil cornices. The northern half of the stūpa has entirely fallen, and on this side the relic chamber, which was set near the top of the drum, is now exposed to view. In the courtyard of the stūpa, numerous chapels and other monuments have been excavated, and some massive walls of a spacious monastery have come to light on the east of the courtyard. It was in this monastery, says Hsüan Tsang, that Kumāralabdha, the founder of the Sautrāntika School, composed his treatises, and in the courtyard of the stūpa that a miracle took place not long

[1] *Cf. Div.* XXII, pp. 314-328. In that particular existence the Bodhisattva was Chandraprabha, and Taxila was the city of Bhadraśilā, over which he ruled. On the spot where the Bhallar Stūpa now stands, there may once have been a stūpa of a hero Chandraprabha, whose cult was subsequently absorbed into Buddhism.

before his time. A woman afflicted with leprosy came to worship at the stūpa and, finding the court all covered with litter and dirty, proceeded to cleanse it and to scatter flowers around the building. Thereupon her leprosy left her and her beauty was restored.

PLATE XXIV.

THE BHALLAṬ STŪPA FROM S.-E.

CHAPTER XI

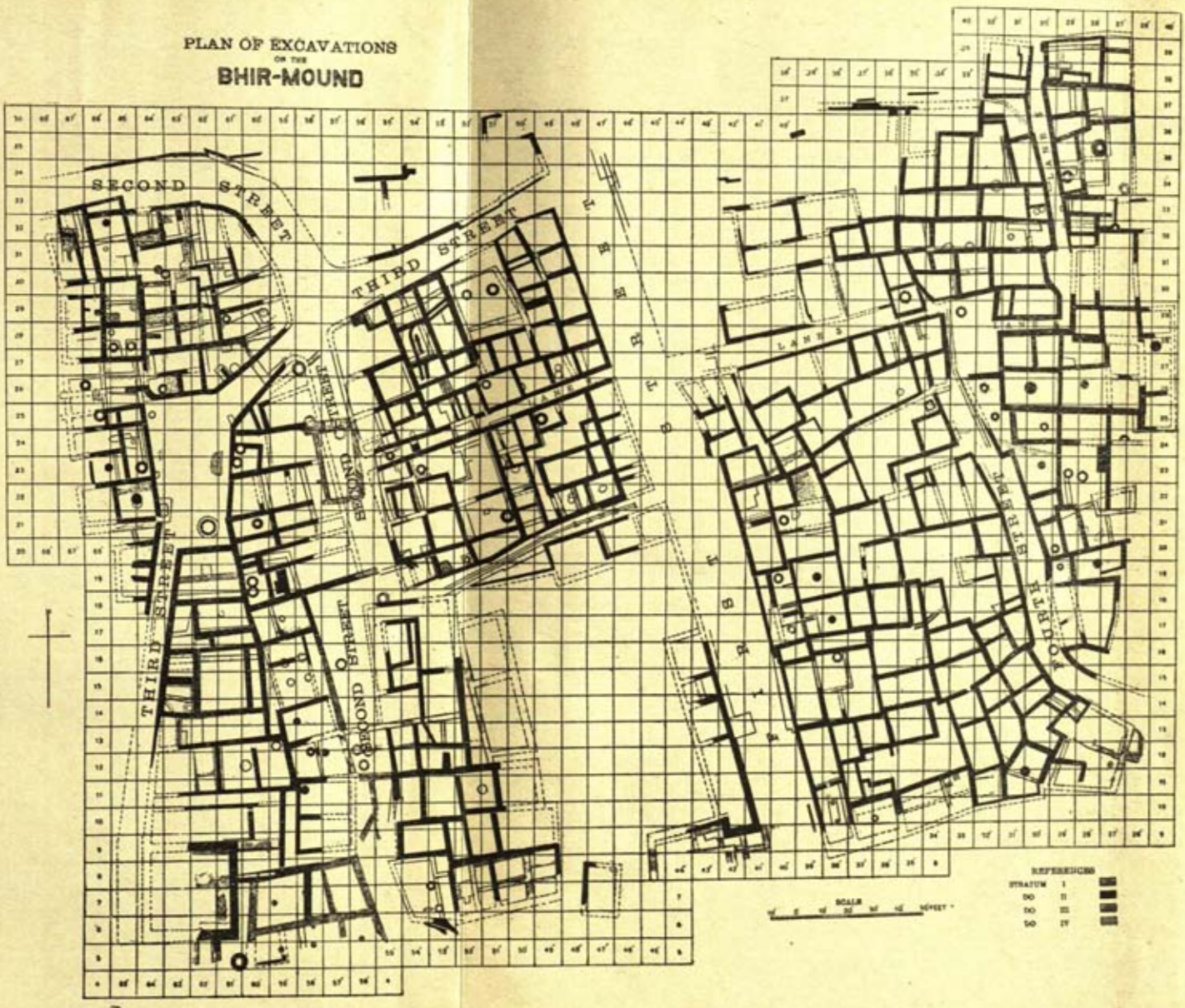
The Bhir Mound

In concluding this description of the ancient ruins of Taxila, it remains to mention the discoveries made in the Bhir Mound—the earliest of the three city sites. In this city, much of the digging has consisted of trial trenches and pits, most of which have been filled in again. A substantial area, however, has been opened up about five minutes' walk south of the archæological museum and a little to the north of the village of Bhir Dargāhī. The buildings disclosed here and in the trial trenches belong to four well defined strata: the uppermost referable to the close of the third century B.C., the second to the Maurya period, the third to the period immediately preceding the Mauryan, and the lowest probably to the sixth or seventh century B.C. The virgin soil is reached at a depth of from 16 to 20 feet below the surface. Of the top stratum nothing has survived but a few fragmentary and scattered remains, which claim no attention. Of the second stratum the buildings exposed to view cover an area of some three acres. For the most part, they consist of blocks of dwelling houses with a broad street

("First Street" in plan, Pl. XXV) running between them and divided one from another by narrower streets and lanes. In their general plan these buildings are much more irregular than those laid bare in the Parthian town of Sirkap, and they differ from them in other features also, particularly in the construction of their walls. Although the masonry on both sites is rubble, on the Bhir Mound it is noticeably more "random" in character, yet withal more compact, the compactness frequently being due to a soft, binding shale used for filling the interstices between the larger stones.

Among other features characteristic of the buildings on the Bhir Mound, but not present in those of Sirkap, may be noticed the pillars of rubble masonry in some of the rooms, and the many narrow circular, or occasionally square, wells. The former were evidently intended for the support of the roofs and usually stand near the centre of the room, though sometimes near one or other of the walls. The wells were designed, not for the drawing of water, but as soak-wells for the disposal of sewage. This is evident not only from the narrowness of their shafts, which vary from 2 ft. to 3 ft. 6 in. in diameter, and from the fact that the masonry of the walls is carried down no more than 13 or 14 ft. below the surface, but from the discovery that two of the wells were packed with numbers of earthen vessels—all turned upside down and obviously laid with great care, just as earthenware vessels, kerosene tins and the like are

PLAN OF EXCAVATIONS
ON THE
BHIR-MOUND



used in modern soak-pits, their purpose being to prevent the pit or well from collapsing, while at the same time not interfering with the soaking-in process of the sewage. From one of the two wells in question, 164 vessels were taken out: 60 broken and 104 intact—comprising *ghaṛās*, *cātīs*, *loṭas*, coolers and pots of various other forms. These vessels filled the shaft of the well to a depth of 12 ft. 7 in. below the masonry; that is, to a depth of some 25 ft. from the surface. Below that point the digging was carried several feet further, but no potsherds or other antiquities were found, nor were there any signs of the soil ever having been disturbed before. Another kind of soak-well was discovered in the block of buildings east of Second Street and south of Lane I. It resembled certain soak-wells in Mesopotamia and was constructed of large earthen jars set one above the other, with a hole in the bottom of each.

Some 200 yards to the north-west of the group of ruins described above, is a complex of buildings containing an oblong hall (59 ft. by 24 ft.), with three square pedestals down its middle. The foundations of the room are of the usual rubble masonry and are standing to a height of about 4 ft. 9 in. The pedestals, which are also of rubble surmounted by rough slabs of limestone, served no doubt as the foundations of wooden pillars to support the roof. The slabs of the two outside pedestals were much calcined and damaged by fire, showing that the building was burnt down.

The minor antiquities found among these ruins on the Bhir Mound comprised earthenware vessels of many varieties; small reliefs, stamped medallions and toys of terracotta; stone saucers and dishes; toilet and other articles of bone, ivory and copper; gold and bronze ornaments; iron implements and domestic utensils; beads and gems; coins; and other miscellaneous articles. Among the potsherds were a number of pieces of fine red ware finished with the black lustrous varnish characteristic of Greek red-figured ware and undoubtedly introduced by the Greeks themselves. On a fragment of one such vase is stamped the familiar head of Alexander the Great wearing the lion's masque. The cut gems from the Bhir Mound are more highly polished and the stones better selected than those from the later cities in Sirkap; the gold-work, too, is remarkable for its fine finish and the delicacy of its granulated and filigree designs. Of the several small hoards of jewellery or coins found on this site, one of the latest contained 160 punch-marked coins of debased silver, a very fine gold Attic Stater of Diodotus struck in the name of Antiochus II of Syria, a gold bangle and several other pieces of gold and silver jewellery, besides a number of pearls, amethysts, garnets, corals and other stones. A gold pendant in the form of a tiger claw and an oblong reliquary are especially beautiful examples of the goldsmith's craft. The coin of Diodotus and the local punch-marked coins point to the latter half of the third century B.C., that is, to the period of Mauryan

occupation of Taxila, as the time when this jewellery was buried. Another and more valuable hoard, which was found in the second stratum near the eastern limits of the excavations, is some two generations older. It contained, besides other articles, a gold and silver necklace and 1,167 silver coins. Of the latter, two are tetradrachms of Alexander the Great, one a stater of Philip Aridæus, and the remainder punch-marked coins of various shapes and sizes.[1]

[1] See A. S. R., 1924-25, pp. 47-8 and Pl. IX.

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GLOSSARY

ACROPOLIS.—(*Gr.*=high city.) The citadel or highest part of a Greek city, usually situated on an eminence commanding the rest of the town.

ANTÆ.—Pilasters terminating the side walls of a classic building.

APSE.—The termination of a building, circular, multangular or semi-circular in plan, with a domical or vaulted roof. The term was first applied to a Roman basilica.

ARCHITRAVE.—The beam or lowest division of the entablature, which rests immediately on the column.

ASHLAR.—Squared stonework in regular courses, in contradistinction to rubble work.

ATLANTES.—Sculptured figures of men used in place of columns or pilasters, supporting or seeming to support a mass above them. Female figures used for the same purpose are known as Caryatides.

BALUSTER.—A small pillar supporting a handrail or coping, the whole being called a balustrade.

BARBICAN.—An outwork intended to defend the entrance to a castle or fortified town.

BODHISATTVA.—See page 42, footnote 1.

CANTHARUS.—A two-handled drinking cup of Greek pattern.

CAVETTO.—A small concave moulding.

COPING.—The capping of a wall or balustrade.

CORBEL.—A block projecting from a wall to support a superincumbent weight.

CORNICE.—In Greek architecture, the highest part of the entablature resting on the frieze; any moulded projection which crowns the part to which it is affixed. *Raking cornice*, a cornice inclining from the horizontal.

CYMA.—A moulding of which the profile is a double curve, concave and convex. *Cyma Recta*, in which the concave curve surmounts the convex; *cyma reversa*, in which the convex surmounts the concave.

DADO.—The lower part of a wall, when decorated separately.

DENTIL.—Tooth-like ornamental blocks in Ionic and Corinthian cornices.

DIAPER.—A small pattern repeated continuously over a wall surface. *Diaper masonry*, a distinctive kind of masonry illustrated on Plate V.

EN CABUCHON.—In the form of a carbuncle, *i.e.*, with a convex upper surface, in contradistinction to that of a garnet, which is facetted.

ENTABLATURE.—In classical architecture, that portion of a structure which is supported by the columns, and consists of the architrave, frieze and cornice.

ENTASIS.—A slight swelling in the shaft of a column.

FILLET.—A small flat moulding having the appearance of a narrow band, genefally used to separate curvilinear mouldings.

FRIEZE.—That part of the entablature which is between the architrave and cornice, usually enriched with figures or other ornaments.

FRONTALITY.—A term applied to archaic statues, which are so rigidly and formally fashioned, that an imaginary plane drawn through the top of the head, nose, backbone, breastbone and navel, divides the figure into two perfectly symmetrical halves.

GLYPTIC.—Pertaining to the art of engraving.

INTAGLIO.—An engraved figure sunk into the face of a gem: the reverse of a cameo, which is in relief.

JĀTAKA, THE.—A Pāli work containing 550 stories about the previous births of Gautama Buddha, who, according to the Buddhist belief, had been born in all created forms, as man, god and animal, before he appeared on earth as the son of Śuddhodana.

KAÑJAR.—The local name of a soft limestone.

KHAROSHTHĪ.—A script derived from Aramaic; it was in vogue in the North-West of India between B.C. 300 and 500 A.D.

MAHĀBHĀRATA.—The great Sanskrit Epic of India, the theme of which is the war between the sons of Kuru and the sons of Pandu. It consists of 18 books and is commonly attributed to the sage Vyāsa.

NANDIPADA.—'Footprint of Nandi,' a device frequently found on ancient coins and supposed to represent the footprint of a bull.

OGEE.—A moulding or arch, of which the curve resembles the cyma reversa (q.v).

PEDIMENT.—The triangular termination of the roof of a classic temple; in Gothic architecture called the "gable."

PERIPTERAL.—An edifice surrounded by a range of columns.

PERISTYLE.—A range of columns surrounding a court or temple.

PILASTER.—A square pillar projecting from a wall.

PRADAKSHINA.—A ceremonial act performed by walking round a stūpa or other sacred edifice from left to right.

PRAKRIT.—The vernacular dialect of ancient India. The various forms of Prakrit are closely allied to literary Sanskrit.

PYXIS.—A Greek jewel box.

REPOUSSÉ.—A style of ornamentation in metal, raised in relief by hammering from behind.

RIDGE-ROOF.—A raised or peaked roof.

ROCOCO.—A debased variety of ornament, in which the decorative devices lack good taste and meaning.

SATĪ.—(*Skr.*). A widow who immolates herself on the funeral pyre of her husband.

SATRAP.—(*Kshatrapa*) Viceroy or Governor of a province. The title was originally a Persian one.

SCOTIA.—A concave moulding used principally in the bases of columns and walls.

SOFFIT.—The underside of any architectural member.

STEATITE.—A stone commonly known as soap-stone.

STŪPA.—See p. 37, footnote 1.

TORAṆA.—A gateway of Indian design.

TORUS.—A convex moulding used principally in the bases of columns.

TRIRATNA.—(*Skr.*) "Three jewels." A trident-like device used to symbolise the trinity of Buddhism. See p. 44, footnote 1.

UNIFACIAL.—A term used of archaic statuary in the round which is conceived by the sculptor in one aspect only, in contradistinction to the plurifacial statuary of developed art, which is conceived simultaneously in all its aspects, *i.e.*, in its three dimensions.

USHNISHA.—A protuberance on the crown of Buddha's head —one of the marks of a great man (=*mahā purusha*).

VAJRAPĀNI—(*Skr.*) 'Bearer of the thunderbolt.' An attendant on the Buddha, whose identity is uncertain.

VISHNU PURĀṆA.—One of the 18 Purāṇas, which deal with creation, with the genealogies of gods and patriarchs and with the dynasties of kings. The dynastic history given in the *Vishṇu Purana* extends to the rise of the Imperial Guptas in the 4th century A.D.

VOLUTE.—The scroll or spiral in Ionic and Corinthian capitals.

MGIPC—L—III-9-45—13-3-36—2,500.

MAP OF TAXILA

SCALE
100 0 100 300 500 700 900 1100 1300 1500 YARDS

N.B. Contours are approximate & represent a vertical distance of 25'
Every fourth contour is drawn thick
Each minute square measures W. to E. (longitude) 1681 yds approx & S. to N. (latitude) 2022 yds
Ancient monuments & mounds containing ancient remains are shown thus .....
New motor road shown thus .....
Foot paths shown thus .....
Heights above mean sea level shown thus 1640
Approximate heights shown thus 2339

N W F P R O V I N C E

H A Z A R A

P U N J A B

D I S T R I C T

SIRSUKH

JANDIAL
ZOROASTRIAN TEMPLE

SIRKAP
PALACE
N. GATE
E. GATE
W. GATE
MONASTERY
DHARMARAJIKA STUPA

DHERI SHAHAN

BHIR MOUND

BADALPUR

Jauliān

FORTRESS

MONASTERY

Khurram Gutar

Khurram Prācha

Lundi Nala

Tamra Nala

Babar Khana

Ghaiu Jumma 1668

Grayeyard

Kacawali

Shadiwali

Ghahpur

Bir Darkani

Mohra Muliana

Mohra Moradu

Mohra Wali Sath

Pippal

Bajran

Stupa & Monastery

Monastery

Sirkap

Sirsukh

Jauliān

Dheri Shahan

Bhir Mound

Taxila Rly Stn

Peshawar 89 m.

Khanpur 6 m.

Hasan Abdal 32½ m.

Utmān Khattar 1 mile

Kotha ½ mile

Ghara

Gorai

Marchhan

Archaeological Bungalow

Nikka Ghar

Tarkan

Khangah

Pir Ghar

Mosque

Tank

Museum

Graveyard

Kacawali

Khurram Gutar

Khurram Prācha

Shadiwali

Jauliān Tank

Stupa & Monastery

Monastery

Fortress

Monastery

Monastery

Dharmarajika Stupa

Sirkap

Sirsukh

Jauliān

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Tank

Museum

Graveyard

Kacawali

Khurram Gutar

Khurram Prācha

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